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United States
Department
of
Agriculture

Forest
Service

R10-MB-518
August 2004



Shady Timber Sale

Decision Notice And Finding of No Significant Impact



For Further
Information Contact: **Jamie Roberts, Project Leader**
Wrangell Ranger District,
Tongass National Forest
Wrangell, Alaska

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United States
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Forest
Service

Alaska Region
Tongass National Forest
FAX (907) 874-7595

Wrangell Ranger District
P.O. Box 51
Wrangell, Alaska 99929
(907) 874-2323

File Code: 1950

Date: August 3, 2004

Dear Review:

Enclosed is your copy of the Decision Notice (DN) and Finding of No Significant Impact (FONSI) for the Shady Timber Sale project on the Wrangell Ranger District, Tongass National Forest.

The Decision Notice documents my decision to select Alternative 2, and the factors considered in reaching the decision. Information concerning implementation of this decision and appeal rights is included in the Decision Notice. New Forest Service regulations (36 CFR 215) regarding appeals of NEPA decisions such as this became effective on June 4, 2003 and contain new requirements related to persons who may appeal and for filing an appeal.

As District Ranger, I am responsible for this decision. Copies of the Shady Timber Sale EA and DN are available for review at the Wrangell Ranger District office. Please direct any correspondence or inquiry to Jamie Roberts, Project Team Leader, Wrangell Ranger District, PO Box 51, Wrangell, AK 99929, or call 907-874-2323. Electronic comments may be sent to comments-alaska-tongass-wrangell@fs.fed.us, with the word "Shady EA" in the subject line.

Sincerely,

Chip Weber

CHIP WEBER
District Ranger





Shady Timber Sale

Decision Notice

**Decision Notice
and
Finding of No Significant Impact**

Shady Timber Sale

**USDA Forest Service, Tongass National Forest
Wrangell Ranger District**

Decision Notice

Introduction

This Decision Notice documents my decision to select Alternative 2 from the Shady Timber Sale Environmental Assessment (Shady EA). This Decision Notice contains a brief summary of the environmental analysis completed for this project, my decision regarding which alternative to implement, and the rationale for my decision. It also contains certain findings required by various laws, and information concerning the right to Administrative Review of this decision.

The Shady Timber Sale EA discloses the environmental effects of proposed timber harvest and associated activities on National Forest System lands. I have reviewed the Shady EA, Forest Plan direction relevant to the project area, and related materials including the Shady project file. I base my decision on that review.

An interdisciplinary (ID) team of resource specialists conducted the effects analysis and prepared the Shady EA. In accordance with the National Forest Management Act and the National Environmental Policy Act, the ID team considered the affected area, formulated alternatives, and estimated environmental consequences based on Forest Plan goals, objectives, and Standards and Guidelines, together with issues raised during scoping. The two alternatives addressed the issues of wildlife habitat, corridors, and habitat connectivity and timber sale economics at various levels. Alternatives included: No Action; using even-aged prescriptions and building minimal temporary roads (provides additional timber and jobs; addresses timber economics); using uneven-aged prescriptions and building minimal temporary roads (addresses wildlife concerns). Detailed information is provided on pages 2-1 through 2-7 of the EA.

The Shady EA is tiered to the Final Environmental Impact Statement (FEIS) for the Tongass Land and Resource Management Plan (Forest Plan), as supplemented by the Final Supplemental Environmental Impact Statement (SEIS) for wilderness considerations. The project file includes additional detail on the ID team's preparation of this Environmental Assessment and is located in the Wrangell District office in Wrangell, Alaska.

The original 2000 Shady Study Area encompassed an area of approximately 4,783 acres of National Forest Land. As we began working on the project, we determined that we could do a better job of addressing issues and effects if we expanded the project area to include the

adjacent Highbush Area (March 2002). The Highbush Timber Sale was initially listed on the Tongass 10-year action plan for 2006, just 2 years after the Shady Timber Sale. We determined that we would prepare an Environmental Impact Statement (EIS) to display the analysis of the proposed action and alternatives for the combined Shady- Highbush project.

In January 2003, we decided not to propose any road building or timber harvest in the Highbush project area and not to propose management in any Inventoried Roadless Areas due to the unresolved Roadless Rule issues. However, the Highbush area is still considered part of the study area for analysis purposes. The project name was changed to Shady Timber Sale and we prepared an Environmental Assessment in place of an EIS.

Location

The Shady Timber Sale is approximately 13 air miles southeast of Wrangell, in the central and eastern portions of Wrangell Island. It lies directly adjacent to State of Alaska selected lands (3,156 acres) around Earl West Cove and along the 6270 Road between Earl West Marsh and Fools Inlet.

Purpose and Need

The purpose and need for this project is:

- To manage suitable timber lands to achieve Forest Plan goals and objectives in order to move from the existing condition toward the desired forest conditions prescribed for the Land Use Designations (LUDs), (Forest Plan, Chapter 2);
- To assist in providing a continuous wood supply to meet society's needs; and
- To contribute to the job market and the over-all economy of Southeast Alaska.

The Shady Timber Sale is included as part of the overall Tongass National Forest timber sale program. A full discussion on the reasons and timing for scheduling timber sales on the Tongass National Forest is included in the project planning record.

Decision

Based on the Environmental Assessment completed for this project, as well as careful consideration of the comments received during the 30-day public review of the document, it is my decision to select Alternative 2 (hereafter referred to as the Selected Alternative).

- The Selected Alternative will involve approximately 240 acres of National Forest System land allocated by the Forest Plan to Timber Production. It will harvest approximately 4,630 MBF [9,446 CCF (Hundred Cubic Feet)] on 240 acres and build approximately 0.6 miles (3,400 feet) of temporary road.
- The proposed timber harvest and road construction for this alternative is within 1,200 feet of the existing road system.
- The temporary roads constructed will be closed and natural drainage patterns restored after harvest. Future options for continued management along the existing road system and possible entry into adjacent Inventoried Roadless Areas are maintained.

- No activities are proposed within Inventoried Roadless Areas.

Rationale for the Decision

In making my decision, I worked to ensure consideration of all issues and took into account the competing interests and values of the public.

- My decision to implement the Selected Alternative is consistent with the Forest Plan and sound National Forest System management. Among the alternatives considered in the Environmental Assessment, the Selected Alternative best meets the purpose and need for the project. I have considered the need to help maintain an adequate timber supply that meets market demand for timber and provides employment in Southeast Alaska in support of community stability. I have also considered the need to provide strong protection measures for scenic values, fish, wildlife, and other resources important to subsistence, and recreation.
- Based on the updated Financial Efficiency Analysis summarized in the EA (Chapter 3), I believe the Selected Alternative has the best combination of jobs, expected bid value and timber volume among the alternatives.
- The Selected Alternative meets the visual quality objectives (VQOs) as specified for priority travel routes.
- My decision to implement the Selected Alternative minimizes road investment by proposing temporary road construction. Temporary roads would be closed to all motorized vehicle use and obliterated following sale activity to protect fisheries and wildlife resources.

Public Involvement

Schedule of Proposed Actions

The Schedule of Proposed Actions is published on a quarterly basis and gives the public an opportunity to comment on proposed projects early in the planning process. The proposed Shady Timber Sale project was first listed on this document in Fall 1999 (See website: www.fs.fed.us/r10/tongass).

Public Mailings

On July 21, 2000, a scoping letter requesting public input on the Shady Timber Sale was mailed to groups and individuals who have expressed interest in Forest Service projects in Southeast Alaska. There were ten comments received for this scoping request. Issues and concerns raised by these groups and individuals are discussed in the EA and in the project planning record.

After the March 2002 decision to expand the Shady Study Area to include the adjacent Highbush area, the project name was changed to Shady-Highbush. It was determined that an Environmental Impact Statement would be prepared. The Shady-Highbush scoping letter was mailed to interested groups and individuals on May 28, 2002. There were fifteen responses to the Shady-Highbush scoping letter.

Because of the January 2003 decision to not build any road or harvest timber in the Highbush area due to unresolved Roadless Rule issues, the project focused on harvest units within the Shady study area only. The project was once again being prepared as an Environmental Assessment. On December 22, 2003, a Shady project update letter was mailed to groups and individuals.

The Shady EA was published in March 2004 and mailed to approximately 265 groups and individuals. There were five comments on the EA.

Local and Regional News Media

A public scoping notice was published in the *Juneau Empire* and the *Wrangell Sentinel* on July 27, 2000, for the Shady Timber Sale Environmental Assessment.

A public notice was published in the *Juneau Empire* and the *Wrangell Sentinel* on April 8, 2004, announcing the availability of the Shady EA and offering a 30-day opportunity to comment.

Subsistence Hearing

A Subsistence Hearing was held on April 27, 2004 at the Wrangell Ranger District to describe the analysis and to answer questions on the possibility of a significant restriction on subsistence use of deer on Wrangell Island. No one from the public attended the open house or the subsistence hearing.

Public Comments to the Environmental Assessment

The EA was mailed out to approximately 265 various Federal and State agencies, Alaska Native groups, municipal offices, businesses, interest groups, and individuals who had previously expressed interest in Forest Service projects in Southeast Alaska. Written and/or verbal comments were received from the following individuals and organizations:

- The Sealaska Corporation;
- Bill Privett, Wrangell, AK;
- B. Sachau, Florham Park, NJ;
- Cascadia Wildlands Project, Alaska Field Office; and
- Ron Schonenbach, Department of Natural Resource, State of Alaska.

These comments have been addressed and the responses to these comments are located in Appendix 2 to this Decision Notice.

Consultation with State, Federal and Tribal Governments

The following Federal and State agencies and federally recognized tribal governments were consulted for this project:

- Wrangell Cooperative Association – November 11, 2002;
- National Marine Fisheries Service – June 14, 2002;
- Department of the Army Regulatory Branch – June 24, 2003;
- U.S. Fish and Wildlife Service – August 18, 2000, June 27, 2002, and October 14, 2003.
- State of Alaska, Division of Governmental Coordination – July 25, 2000, August 21, 2000, and June 4, 2002;
- State of Alaska, Department of Environmental Conservation – July 28, 2000 and June 12, 2002.
- State of Alaska, Department of Natural Resources – July 19, 2004
- Alaska Department of Fish and Game – April 22, 2003, October 20, 2003, and October 9, 2003.

Issues

In making my decision, I examined each alternative's environmental effects, responsiveness to the key issues identified in the EA, the consistency of the alternatives with the Forest Plan, and public comments I received during the public scoping period and in response to the EA. Table DN-1, page 8, provides a comparison by issue of each alternative. The significant issues are described below.

Issue 1: Project Economics

This issue relates to the economic viability of the proposed timber sale, and the potential employment and revenues generated by the project.

Issue 2: Wildlife habitat, connectivity and travel corridors

This issue relates to wildlife travel corridors, habitat between Old-Growth Reserves (OGR) and the potential reduction in preferred habitat for various wildlife species.

Other Issues Raised During Scoping

Other concerns, raised either internally or through public scoping, were considered but not used as primary issues for alternative development and analysis. Some are addressed through other processes, such as the Forest Plan Standards and Guidelines or Best Management Practices, or their resolution is beyond the scope of this project. See Chapter 3 of the EA and specialist resource reports in the project planning record for a more complete discussion of these concerns.

Subsistence: Effects to human access and harvest levels of deer, moose, and other subsistence resources will be insignificant under either alternative for the Shady project area.

Silviculture: An analysis of changes in stand structure over time by alternative was conducted. No significant change was evident as a result of this analysis.

Scenery: Proposed harvest within views of marine travel routes, public use roads, developed recreation sites and hiking trails will meet the required Modification VQO.

Recreation: The proposed activities will have temporary effects on recreational driving on forest roads on Wrangell Island due to logging operations. Once logging operations are finished, recreational driving opportunities will return to their existing condition

Wetlands: The proposed activities are not anticipated to affect wetlands. The proposed activities will result in a temporary change to the existing vegetation.

Forest Soils: The proposed activities are not anticipated to increase local soil movement and landslide activity. A soil scientist has inspected and determined that steep slopes within cutting units and road locations are not anticipated to cause soil movement of landslides (see the unit cards in Appendix A of the EA or in Appendix 1 of the DN/FONSI). No activities are proposed on high-hazard soils.

Watershed: No problematic or sensitive stream courses have been identified in the project area. Appropriate buffers, Forest Plan Standards and Guidelines, and BMPs have been incorporated into unit design.

Fisheries and Marine Habitat: BMPs provide assurance of water quality and aquatic habitat protection for all freshwater streams in the project area.

Heritage resources: The proposed activities will not directly affect historic properties within the project area.

Alternatives Considered

A description of the alternatives considered in the Shady Timber Sale Environmental Assessment follows. Table DN-1, below, provides a brief comparison of the alternatives.

Alternative 1 (No Action)

This alternative proposes no timber harvest or road construction. This alternative would not move the project area towards the desired future condition as described in the Forest Plan and in Chapter 1 of the EA. This does not preclude timber harvest from other areas or from the Shady area at a future date. This alternative can be used as a benchmark by the decision-maker to compare the environmental effects of the action alternatives with the existing condition.

This alternative would not provide for an economic and long-term sustained yield of wood to local and regional markets. Local timber purchasers have little wood remaining under contract. Without new economic timber sales like the Shady Timber Sale, they may close, putting people out of work and adding impacts to the Southeast Alaska economy. The existing scenic values of the project area would be retained under this alternative.

Alternative 2 (Selected Alternative)

Alternative 2 is designed to emphasize project economics. It will implement the Standards and Guidelines outlined in the Forest Plan. It promotes project economics by providing more

wood for harvest this entry, and reduces project costs by using conventional logging systems and even-aged management.

This alternative manages 240 acres along the existing road system. It will harvest approximately 4,630 MBF [9,446 CCF (Hundred Cubic Feet)] on 240 acres and build approximately 0.6 miles (3,400 feet) of temporary road.

The proposed timber harvest and road construction is within 1,200 feet of the existing road system. There will be no timber harvest or road construction within Inventoried Roadless Areas.

The temporary roads constructed will be closed and natural drainage patterns restored after harvest. Future options for continued management along the existing road system and possible entry into adjacent Inventoried Roadless Areas are maintained.

Alternative 3

Alternative 3 is designed to provide timber harvest and road construction while minimizing effects on wildlife habitat, connectivity and travel corridors. This alternative will implement mitigation measures that exceed those required by Forest Plan Standards and Guidelines for some resources. It attempts to minimize effects on wildlife by reducing the size of openings, using patch cuts, and retaining 60 percent of the stands in the Fools Creek units (Units 25, 26, 27).

This alternative manages 270 acres (actual harvest of 159 acres) along the existing road system. It will harvest approximately 3,139 MBF (6,404 CCF) on 159 acres and build 0.5 miles (2,600 feet) of temporary road.

The proposed timber harvest and road construction is within 1,200 feet of the existing road system. There will be no timber harvest or road construction within Inventoried Roadless Areas.

The temporary roads constructed will be closed and natural drainage patterns restored after harvest. Future options for continued management along the existing road system and possible entry into adjacent Inventoried Roadless Areas are maintained.

Comparison of Alternatives by Issue

Table DN-1 provides a comparison of the alternatives, focusing on the key issues. For more detailed descriptions of the environment and the effects of the alternatives, refer to Chapter 3 of the EA.

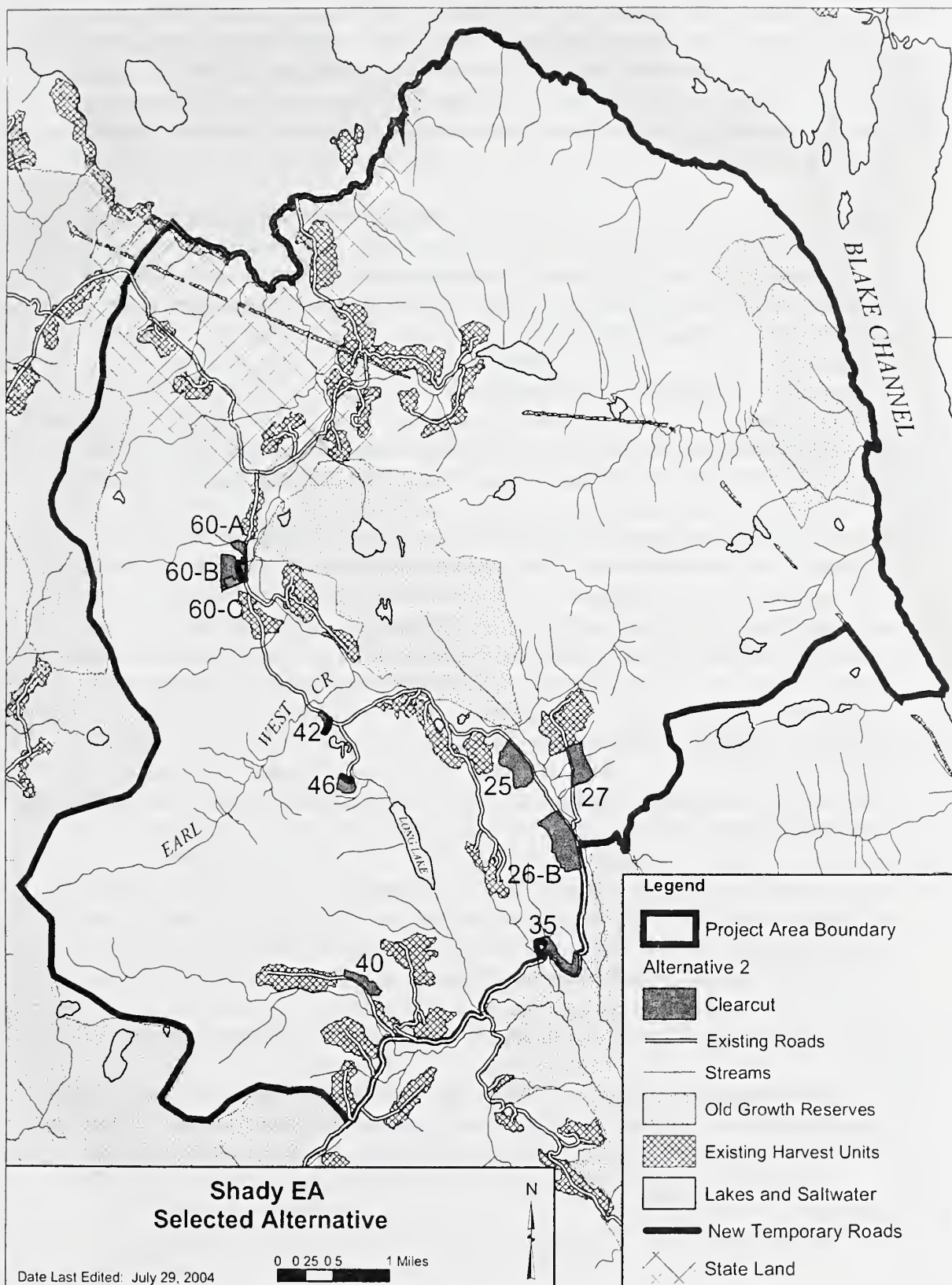
Table DN-1 Comparison of Alternatives by Issue

Issue/Measurement	Unit	Alt. 1	Alt. 2	Alt. 3
Project Economics			Selected Alternative	
Acres harvested	acres	0	240	159
Total volume harvested	MBF ¹	0	4,630	3,139
Total volume harvested	CCF	0	9,446	6,404
Expected Bid Rate w/6" top ²	\$/CCF	0	\$(5.16)	\$(5.98)
Expected Bid Rate w/10" top	\$/CCF	0	\$14.23	\$13.21
Temporary Road Construction	miles	0	0.6	0.5
Direct Jobs Created	#/year	0	25	17
Income from Direct Jobs	\$/year	0	\$1,110,680.60	\$753,012.74
		Alt. 1	Alt. 2	Alt. 3
Wildlife habitat & travel corridors	Existing Acres	Acres Harvested		
High Volume POG	5,788	0	132	90
Medium Volume POG	5,909	0	89	57
Low Volume POG	3,264	0	9	7
High probability marten habitat	5,420	0	132	90
High probability goshawk habitat	2,957	0	120	77
High probability marbled murrelet habitat	10,732	0	222	147
High-value deer winter range (HSI>.64)	231	0	7	7

¹ Thousand Board Feet (MBF)

² () indicates a negative value.

Figure DN-1 Selected Alternative Map



Findings Required By Law

National Forest Management Act - The National Forest Management Act (NFMA) requires specific determinations to be made for this project: consistency with the Forest Plan and FSM 2410.3, R10 Supp. 2400-2002-1 (5/7/2002), a determination of clearcutting as the optimal method of harvesting, if used, and specific authorizations to create openings over 100 acres in size. Specific information and rationale used to develop unit prescriptions is shown on unit cards, in Chapter 3 of the EA, and in the planning record.

The Forest Plan complies with all resource integration and management requirements of 36 CFR 219 (219.14 through 219.27). Application of Forest Plan direction for the Shady project ensures compliance at the project level.

Specific NFMA findings pertaining to silviculture systems are included in unit cards and the project planning record.

Tongass Land and Resource Management Plan – All project alternatives comply with the Tongass Land and Resource Management Plan. This project incorporates all applicable Forest Plan Standards and Guidelines and management prescriptions as they apply to the project area, and complies with Forest Plan goals and objectives.

Clearcutting as the Optimal Method of Harvesting - The Forest Plan (4-96 to 4-97) gives guidance on when to use even-aged management. Clearcutting (an even-aged method) is used in this project to preclude or minimize mistletoe infestations, yellow-cedar decline, logging damage or other factors affecting forest health. Specific information for use of this prescription is shown in the silvicultural prescriptions, which is part of the project planning record, and in the individual unit cards in Appendix A. Where used, this prescription has been deemed optimal related to site-specific considerations as described above.

Harvest Openings Over 100 Acres in Size - There are no harvest openings over 100 acres proposed for this project.

Endangered Species Act – None of the alternatives is anticipated to have a direct, indirect or cumulative effect on any threatened and endangered species in or outside the project area. Consultations with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service have been conducted, and these agencies have concurred that the proposed project is not likely to affect any threatened or endangered species. A complete Biological Assessment is included in the planning record.

Tongass Timber Reform Act – Application of Forest Plan riparian Standards and Guidelines ensures that no commercial timber harvest will occur within 100 feet of any Class I stream or any Class II stream flowing directly into a Class I stream.

National Historic Preservation Act – In accordance with the Act, the Tongass National Forest has a program to identify, evaluate, preserve, and protect heritage resources. Heritage resource investigations of various intensities have been conducted in the Shady project area, following inventory protocols approved by the Alaska State Historic Preservation Officer (SHPO). Our work includes background and existing literature searches and fieldwork complete with subsurface testing. Native communities have been contacted, and public comment encouraged. The Wrangell Cooperative Association was consulted during analysis for this project. The Alaska SHPO was consulted and our obligations under 36 CFR 800 have been met.

Federal Cave Resource Protection Act – There are no caves within the project area.

Alaska National Interest Lands Conservation Act (ANILCA) – An ANILCA Section 810 subsistence evaluation was conducted. The analysis led to the conclusion that there may be the significant possibility of a significant restriction on subsistence use of deer on Wrangell Island due to cumulative effects. See Section 3.3 of the EA for more details.

Clean Water Act – Congress intended the Clean Water Act of 1972 (Public Law 92-500) as amended in 1977 (Public Law 95-217) and 1987 (Public Law 100-4) to protect and improve the quality of water resources and maintain their beneficial uses. Section 313 of the Clean Water Act and Executive Order 12088 of January 23, 1987 address Federal agency compliance and consistency with water pollution control mandates. Agencies must be consistent with requirements that apply to "any governmental entity" or private person. Compliance is to be in line with "all Federal, State, interstate, and local requirements, administrative authority, and process and sanctions respecting the control and abatement of water pollution".

The Clean Water Act (Sections 208 and 319) recognized the need for control strategies for nonpoint source pollution. The National Nonpoint Source Policy (December 12, 1984), the Forest Service Nonpoint Strategy (January 29, 1985), and the USDA Nonpoint Source Water Quality Policy (December 5, 1986) provide a protection and improvement emphasis for soil and water resources and water-related beneficial uses. Soil and water conservation practices (BMPs) were recognized as the primary control mechanisms for nonpoint source pollution on National Forest System lands. The Environmental Protection Agency supports this perspective in their guidance, "Nonpoint Source Controls and Water Quality Standards" (August 19, 1987).

The Forest Service must apply Best Management Practices that are consistent with the Alaska Forest Resources and Practices Regulations to achieve Alaska Water Quality Standards. The site-specific application of BMPs, with a monitoring and feedback mechanism, is the approved strategy for controlling nonpoint source pollution as defined by Alaska's Nonpoint Source Pollution Control Strategy (October 2000). In 1997, the State approved the BMPs in the Forest Service's Soil and Water Conservation Handbook (FSH Handbook 2509.22, October 1996) as consistent with the Alaska Forest Resources and Practices Regulations. This Handbook is incorporated into the Tongass Land Management Plan.

A discharge of dredge or fill material from normal silviculture activities such as harvesting for the production of forest products is exempt from Section 404 permitting requirements, in waters of the United States, including wetlands (404(f)(1)(A)). Forest roads qualify for this exemption only if they are constructed and maintained in accordance with best management practices to assure that flow and circulation patterns and chemical and biological characteristics of the waters are not impaired (404(f)(1)(E)). The BMPs that must be followed are specified in 33 CFR 323.4(a). These specific BMPs have been incorporated into the Forest Service's Soil and Water Conservation Handbook under BMP 12.5.

The design of harvest units for the Selected Alternative was guided by Standards, Guidelines and direction contained in the Forest Plan, and applicable Forest Service Manuals and Handbooks. The unit cards (Appendix A of the EA and Appendix I of the DN/FONSI) contain specific details on practices prescribed to prevent or reduce non-point sediment sources.

Monitoring and evaluation of the implementation and effectiveness of the Forest Plan Standards and Guidelines and Best Management Practices will occur. Project activities are expected to meet all applicable State of Alaska Water Quality Standards Regulations.

Clean Air Act - Emissions anticipated from the implementation of any project alternative will be of short duration and are not expected to exceed State of Alaska ambient air quality standards (18 AAC 50).

Coastal Zone Management Act

Under the Coastal Zone Management Act (CZMA) of 1972, as amended, Forest Service activities and development projects that affect the coastal zone must be consistent to the maximum extent practicable with the enforceable policies of the Alaska Coastal Management Program (ACMP). Such "consistency determinations" are made by the Forest Service, and are reviewed by the State of Alaska as required by the CZMA.

Under the Alaska Forest Resources and Practices Act (AFRPA) of 1979 (as amended), Forest Service timber harvest projects satisfy the CZMA consistency requirement if the Forest Plan and all related Standards and Guidelines applicable to the project provide no less resource protection than the AFRPA requires for timber harvest projects on State land, except that the AFRPA specifies a different minimum riparian standard for Federal projects than for State projects.

The Forest Service has determined that the Shady project does not affect the coastal zone, and that Forest Plan Standards and Guidelines and mitigation measures applicable to the Shady project meet or exceed the requirements of the State of Alaska Forest Resources and Practices Act. Therefore, the project is consistent to the maximum extent practicable with the enforceable policies of the Alaska Coastal Management Program. Copies of this determination and supporting information will be provided to the State of Alaska, Department of Program Management and Permitting, for review as required by the CZMA.

Executive Order 11988 directs Federal agencies to take action to avoid, to the extent possible, the long- and short-term adverse impacts associated with the occupancy and modification of floodplains.

The numerous streams in the Shady project area make it virtually impossible to avoid what is technically considered the “flood prone area” of streams during timber harvest and road construction. However, timber harvest and road construction activities in the Shady project area are well outside of all identified floodplain stream channels. Therefore, no direct adverse effects on floodplains are expected from project activities.

Executive Order 11990 requires Federal agencies to avoid, to the extent possible, the long- and short-term adverse impacts associated with the destruction or modification of wetlands.

Because wetlands are so extensive in the Shady project area, it is not feasible to avoid all wetland areas. Wetland soils not meeting Forest Plan criteria for timber harvest suitability are excluded from the harvest base. Soil moisture regimes and vegetation on some wetlands may be altered in some harvest units. However, the affected wetlands will meet wetland classification and will still function as wetlands in the ecosystem.

Road construction across wetlands is permitted within Alaska. Such construction requires the filling-in of wetlands and creates permanent loss of wetland habitat. Effects to wetlands are minimized through the application of specific BMPs. Road construction through wetlands is avoided where possible.

Executive Order 12898 directs Federal agencies to identify and address the issue of environmental justice, i.e., adverse human health and environmental effects of agency programs that disproportionately impact minority and low-income populations.

Implementation of any project alternative is not anticipated to cause disproportionate adverse human health or environmental effects to minority or low-income populations.

Executive Order 12962 directs Federal agencies to conserve, restore, and enhance aquatic systems to provide for increased recreational fishing opportunities nationwide.

With the application of Forest Plan Standards and Guidelines, including those for riparian areas, no significant adverse effects to freshwater or marine resources will occur. Post-project road closures could limit, to foot-traffic or permitted all-terrain vehicles (ATV), access to some recreational fishing opportunities. However, most recreational fishing throughout the Tongass occurs by boat in saltwater, and any adverse effects would be minimal.

Implementation Date

Implementation of decisions made by myself, which are subject to appeal pursuant to 36 CFR part 215, may occur on, but not before, 5 business days from the close of the appeal filing period, if no appeal is filed. The appeal filing period closes 45 days after publication of legal notice of this decision in the *Wrangell Sentinel*, the newspaper of record, published in Wrangell, Alaska.

Right to Appeal or Administrative Review

This decision is subject to administrative review (appeal) pursuant to 36 CFR Part 215. Individuals or organizations who submitted substantive comments during the comment period specified at 215.6 may appeal this decision. The Notice of Appeal must be in writing, meet the appeal content requirements at 215.14 and be filed with the Appeal Deciding Officer:

Forest Supervisor Forrest Cole
Supervisor's Office
Federal Building
Ketchikan, Alaska 99901-6591

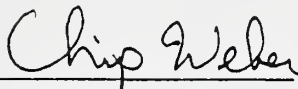
Fax: (907) 228-6215

The Notice of Appeal, including attachments, must be filed (regular mail, fax, e-mail) express delivery or messenger service) with the Appeal Deciding Officer at the correct location within 45 calendar days of publication of notice of this decision in the *Wrangell Sentinel*, the newspaper of record. The publication date in the newspaper of record is the exclusive means for calculating the time to file an appeal. Those wishing to appeal this decision should not rely upon dates or timeframe information provided by any other source.

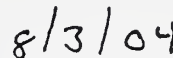
Appeals submitted electronically, including attachments, must be in an electronic format compatible with Microsoft Word.

Hand-delivered appeals will be accepted at the Supervisor's Office during normal business hours (8:00 am through 4:30 pm) Monday through Friday, excluding holidays.

Implementation of decisions subject to appeal pursuant to 36 CFR part 215, may occur on, but not before, 5 business from the close of the appeal filing period.



CHIP WEBER
District Ranger



Date

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Shady Timber Sale

**Finding of No Significant Impact
(FONSI)**

Shady Timber Sale EA

Finding of No Significant Impact

USDA, Forest Service, Tongass National Forest
Wrangell Ranger District, Wrangell, Alaska

Introduction

All major Federal actions must undergo some level of environmental analysis in compliance with the National Environmental Policy Act of 1969 (NEPA). NEPA provides for three levels of analysis, with different documentation requirements for each level.

- Proposals to take major Federal actions that may significantly affect the quality of the human environment require preparation of an Environmental Impact Statement (EIS), with a decision documented in a Record of Decision (ROD).
- Routine proposed actions that fit within specific categories defined in the Forest Service Handbook (FSH 1909.15.30) may be excluded from documentation in an EIS or Environmental Assessment (EA); however, a project or case file is often required and the decision to proceed is documented in a Decision Memo (DM).
- An EA is prepared for proposed actions that are not categorically excluded from documentation, and for which the need for an EIS has not been determined.
The purpose of an EA is to:
 1. Briefly provide sufficient evidence and analysis for determining whether to prepare an EIS or a Finding of No Significant Impact (FONSI).
 2. Aid an agency's compliance with the National Environmental Policy Act (NEPA) when no EIS is necessary.
 3. Facilitate preparation of an EIS when one is necessary. (40 CFR 1508.9)(a)).

The decision to proceed with a project that has been analyzed in an EA is documented in a Decision Notice (DN). Often, the FONSI is included within the DN.

The proposed Shady Timber Sale fits into the group of actions for which an EA was prepared.

A FONSI is a document prepared by a Federal agency briefly presenting the reasons why an action will not have a significant effect on the human environment and as a result an EIS will not be prepared. It shall include the environmental assessment or a summary of it and shall note any other environmental documents related to it (1501.7(a) (5)). If the assessment is included, the finding need not repeat any of the discussion in the assessment but may incorporate it by reference (40 CFR 1508.13).

Finding of No Significant Impact

In making a determination of "significant impact," we use the criteria described under the term "significantly" in the Forest Service Environmental Policy and Procedures Handbook (FSH 1909.15 (05)). This term includes both context and intensity. These criteria are listed below in italics.

1) Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.

Chapter 3 of the Shady EA describes effects that are both beneficial (jobs) and adverse (change in habitat). While both beneficial and adverse effects are important, they are not significant, in either context or intensity, to the degree that an EIS is warranted for the Shady project.

2) The degree to which the proposed action affects public health or safety.

This action does not pose a substantial question of significant effect upon public health or safety. Similar past forest management activities have not resulted in significant effects upon public health or safety. All applicable Federal and State laws pertaining to public health and safety would be followed.

3) Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

This decision would not significantly affect any unique characteristics of the geographic area. There are no known significant effects to prime farmlands, wetlands, wild and scenic rivers, wilderness or ecologically critical areas. No roads would be built into any Inventoried Roadless Area.

4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.

The effects on the quality of the human environment are not likely to be highly controversial. Although there is controversy over timber harvest in Southeast Alaska in general, scientific and professional experience indicates harvest can occur without significant environmental effects.

5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

There are no known effects on the human environment that are highly uncertain or involve unique or unknown risks. The mitigations, harvest methods, and other features of this decision are either commonly used and/or present known risks.

6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

The proposed action does not set a precedent for any future actions with significant effects nor does it represent a decision in principle about a future consideration. This decision only pertains to the timber harvest within the Shady project area. Any future decisions will need to consider relevant scientific and site-specific information available at that time.

7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.

There are no known significant cumulative effects between this project and other projects implemented or planned on the areas separated from the affected area of this project. Cumulative effects have been analyzed and disclosed throughout Chapter 3 of the EA.

8) The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

This action would not cause the loss or destruction of significant scientific, cultural, or historical resources. There are no known cultural resource sites that would be affected by this project. A Cultural Resource Investigation culminated in a detailed report which was prepared and submitted to the State Historic Preservation Officer (SHPO) with our Heritage Program Annual Report (2002). We have determined that no known historic properties will be affected by project implementation (EA, section 3.11).

9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

No threatened, endangered or sensitive species or their critical habitats are affected by this decision. The planning file contains the biological evaluations supporting this judgment (EA, section 3.2.6).

10) Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

This action does not violate Federal, State, or local law requirements imposed for the protection of the environment, and has been reviewed by Federal and State agencies (EA, page 1-7). There are no known significant effects on civil rights, women or minorities (EA, section 3.12).

Table of Findings

The following table is useful in displaying our rationale for a finding of no significant impact.

Context – What is the effect?	Intensity – How big is it?	Reasons why this is not significant.
Old growth acres are converted to second growth through even-aged harvesting.	Up to 240 acres within the 26,500 acre project area could be harvested.	240 acres is about 1.7% of the 13,840 acres of Productive Old-Growth in the project area. (EA section 3.2.2)
High, Medium and Low volume strata (volstrata) are harvested in the project area.	Up to 132 acres High volstrata Up to 89 acres Med. volstrata Up to 9 acres Low volstrata could be harvested.	2.3% of 5,761 acres of High 1.8% of 4,867 acres of Med 0.3% of 3,212 acres of Low (EA section 3.2.2; Table 3-4)
Coarse canopy acres (volume class 6 and 7) may be harvested.	Up to 10 acres of volume class 6 and 7 could be harvest.	10 acres is about 1.4% of the 723 acres of existing volume class 6 and 7 stands. (EA section 3.2.2)
Wildlife travel corridors may be affected by additional harvest in the project area.	Two Units (60 and 63) are located adjacent to an identified wildlife travel corridor between two small Old-Growth Reserves (OGRs).	Beach buffers, riparian management areas, location of small OGRs, and retention within units all combine to provide sufficient travel corridors.(EA section 3.2.3)
Harvesting trees using an even-aged method can contribute to forest fragmentation.	Up to 16 acres of interior old-growth could be changed to second growth and 18 acres changed to edge forest (adjacent to an opening).	4,757 of the existing 4,791 acres of interior old-growth (99.3%) would remain as interior old-growth. (EA section 3.2.4)
High-value goshawk nesting habitat could be reduced.	Up to 120 acres of low elevation (<800 ft.), high volume strata could be harvested.	120 acres is 4.2% of the 2,957 acres of existing high-value goshawk nesting habitat. (EA section 3.2.8; Table 3-6)
High-value marten habitat could be reduced.	Up to 132 acres of low elevation (<1500 ft.), high volume strata could be harvested.	132 acres is 2.5% of the 5,420 acres of existing high-value marten habitat. (EA section 3.2.8; Table 3-6)
Marbled murrelet nesting habitat could be reduced.	Up to 222 acres of medium and high volume strata could be harvested.	222 acres is 2.1% of the 10,732 acres of existing marbled murrelet nesting habitat. (Table 3-6)
High-value deer winter range could be reduced in the project area and on Wrangell Island.	Up to 7 acres of high-value deer winter range could be converted to second growth.	7 acres is 3.1% of the 231 acres of high-value winter range in the project area, and 0.2% of the 3,400 acres on Wrangell Island (EA section 3.2.9; Table 3-7)

Context – What is the effect?	Intensity – How big is it?	Reasons why this is not significant.
Habitat capability for deer could be reduced	Habitat capability could be reduced to 598 deer within the project area.	This would be a reduction of 9 deer, or 1.5% below the current habitat capability of 607 deer. (Table 3-8)
Cumulative effects of past, present and future activities under the current Forest Plan could lead to a reduction in deer available for subsistence and non-subsistence harvest.	Implementation of the Forest Plan over the next 100 years, in conjunction with other factors, could lead to the possibility of a restriction on subsistence deer harvest.	Restrictions are modeled to occur by 2095, not in the near future. A subsistence hearing was held on April 27, 2004 for this project (page DN-4 of this document).
Management activities may affect the scenic resource, particularly views from travel routes.	No harvest will be visible from marine travel routes. All units will be visible from either the Fools Inlet Road or the Long Lake Road.	The Land Use Designation is Timber Management, where harvest units are expected to be visible. All units will meet the Modification Visual Quality Objective (VQO) (EA section 3.5)
Inventoried Roadless Areas exist within the project area.	No timber harvest or road construction will occur in any Inventoried Roadless Area.	The three Inventoried Roadless Areas that are partially within the project area will remain unchanged. (EA section 3.6.3)
Temporary roads may be constructed to facilitate timber harvest.	Up to 0.6 mile of temporary road may be constructed.	All temporary roads will be closed following harvest. (EA sections 2.3)
Some timber harvest may occur on forested wetlands.	Up to 53 acres of forested wetland could be harvest.	53 acres is 0.4% of the 12,220 acres of forested wetland mosaic in the project area. (EA section 3.7)
Some timber harvest may occur on slopes in excess of 72%.	Up to 20 acres of harvest could occur on slopes greater than 72%.	No impacts to adjacent resources (Class I or II streams, or roads) are expected to result from potential mass failures. (EA section 3.8)
Cumulative harvest within a watershed will increase.	Cumulative % of watershed harvested in West Fools would be 7.9% and in East Fools would be 10%	The cumulative harvest is well below the threshold of concern, which is generally 20%. (EA section 3.9)

Shady Timber Sale

Appendix 1

Unit Cards

Appendix 1

Unit Cards

Introduction

The unit cards are used to explain site-specific information about each unit and any resource concerns and mitigations. They include a narrative card and map for each unit, and explain stand conditions and harvest treatments for each unit.

Silvicultural prescriptions were developed to meet the management objectives based on each site and the Forest Plan direction. A complete description of silvicultural systems and stand prescriptions is included in the Silvicultural Resource Report.

Minor changes to boundary layout and to the prescriptions are expected during implementation to better meet on-site conditions and objectives. The harvest treatment descriptions on the unit cards are basic guidelines designed to achieve the desired stand structure and address resource concerns and logging system operability.

Timber Management LUD

Scenery Standards and Guidelines

The following Visual Quality Objectives (VQOs) for the Forest Plan provide standards for management based on the landscape's scenic characteristics and public viewing concern.

- **Modification:** Changes in the landscape may visually dominate the surrounding natural landscape; however, they should be compatible with the surrounding landscape.
- **Maximum Modification:** Management activities may visually dominate the characteristic or surrounding landscape.

Distance Zone

Timber Management

For areas visible from Visual Priority Travel Routes and public use areas:

Foreground (0-1/2 miles):

Modification

Middleground (1/2 – 3 to 5 miles):

Modification

Background (3 to 5 miles and greater):

Maximum Modification

For areas not visible from Visual Priority Travel Routes:

All areas

Maximum Modification VQO

Appendix 2

The Timber Production LUD focuses on achieving visual characteristics similar to natural occurrences in the immediate viewing area while allowing a sustained yield of timber.

Fisheries and Watershed

All known streams are shown on the unit card maps. These streams and any additional streams found during layout will be protected by following the Forest Plan Riparian Standards and Guidelines listed below. Class IV streams would be protected by the following Best Management Practices (BMPs).

Riparian Management Areas

Stream buffers maintain biodiversity and productivity, streambank and stream channel processes, and the natural and beneficial qualities of large woody debris over the short and long term. Riparian Management Areas (RMAs) are areas of special concern to fish, other aquatic resources and wildlife. They are generally delineated as identified in the process group direction (RIP2, II, E).

Riparian Standards and Guidelines for Timber Harvest

The Tongass Timber Reform Act (TTRA) mandates leaving a minimum 100-foot wide buffer along both sides of all Class I and Class II streams that flow into Class I streams. This was incorporated into the Forest Plan Standards and Guidelines as “No commercial harvest within 100 feet of Class I streams and Class II streams that flow into Class I streams.”

Windfirm Buffers

These are buffers added alongside stream buffers to improve windfirmness to the stream buffer. Site-potential tree heights vary according to the channel type.

Unit Card Changes and Corrections

- Unit 25: The TTRA buffer that was incorrectly mapped was removed.
- Unit 27: For clarification purposes, the concern for Water Quality and Fisheries was changed to “Erosive cut-slopes have been identified along the 6573 Road and may contribute sediment directly to the stream channel.”
- Unit 26: The location of the Riparian Management Area (RMA) buffer was corrected.

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Volstrata Acres:	Low: <u>1</u>	Medium: <u>13</u>	High: <u>30</u>	Net Volume (MBF/Acre): <u>21 MBF</u>
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Unit Development & Stand Description:

The current stand is an over-mature multi-layered stand that has resulted from gap-phased stand initiation caused by mortality of overstory trees. Current stand composition is approximately 98% western hemlock, 1% Alaska yellow-cedar and 1% Sitka spruce. The stand consists of a large component of highly-defective trees, particularly in the western hemlock. The understory is fully stocked with western hemlock advanced regeneration. Net volume growth is static or declining due to mortality and decay.

Stand Management Objectives:

Even-aged regeneration harvest using conventional cable yarding systems. Future stand structure will be primarily even-aged with some overstory trees retained for wildlife and biodiversity purposes.

Natural regeneration is expected. Future treatments may include precommercial thinning and timber stand improvement to enhance forest health and timber management objectives.

Water Quality and Fisheries

Concern: One Class IV stream channel within the unit boundary

Mitigation: Avoid pulling logs down the stream channel if possible, or provide at least partial suspension across Class IV stream. Split yard to either side of the stream channel.

Soils

Concern: Soil disturbance associated with logging.

Mitigation: Implement BMP 12.17.

Wildlife:

Concern: High value marten habitat. Raptor observations in vicinity. Marbled murrelet activity. High value deer winter habitat. Wildlife corridor values.

Mitigation: Retain at least 7 trees >20 inches DBH (4 live trees and 3 decadent trees) per acre and at least three pieces of downed woody material (>20 inches diameter at large end and 10 feet long) per acre to meet Forest Plan Marten Standards. If eggshell fragments or nests are located, flag nearest tree and report to wildlife biologist. Protect raptor nests with a forested 600-foot wind-firm buffer and prevent disturbance from March 1 through July 31 to meet Forest Plan Raptor Standards. Protect marbled murrelet nests with a 600-foot wind-firm buffer and minimize disturbance activities from May 1 through June 15 to meet Forest Plan Marbled Murrelet Standards. Wildlife corridor and deer winter habitat concerns will be mitigated by marten retention and additional retention wherever possible.

Visuals:

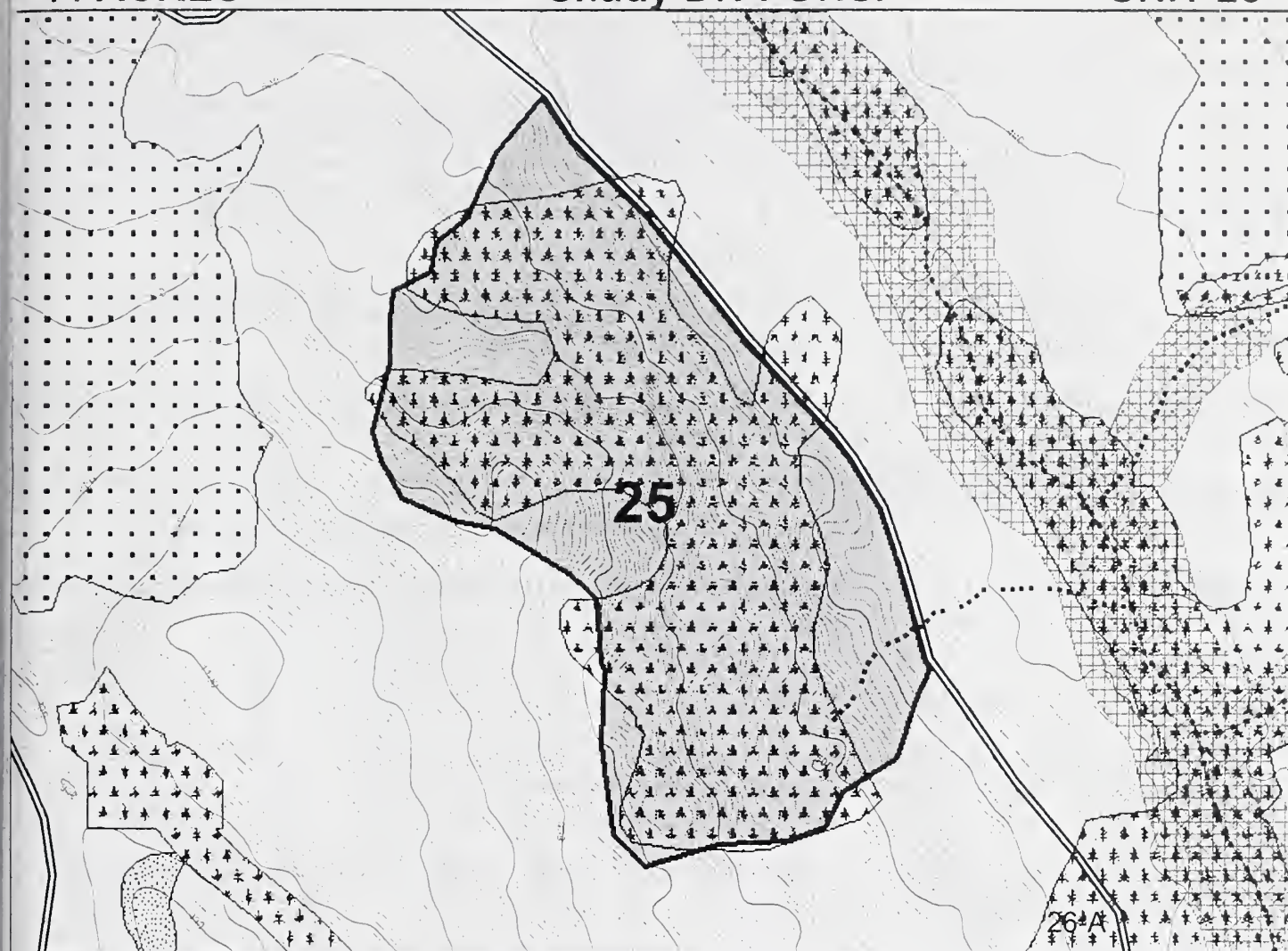
Concern: Unit is located along visual priority route (FDR #6270) within the Timber Management LUD. Meet the Modification VQO in the foreground from priority use route. Unit boundary is parallel with road for approximately one-third mile.

Mitigation: Leaving a series of variable width leave strips between approximately 3-5 landings located along the road. The unit would be yarded to each of these landings in a radial pattern. The leave areas between the landings would be roughly wedge-shaped with the apex of the wedge strip being roughly 300 to 400 feet wide then tapering to a lesser width at each landing. Impacts of logging slash at landings would be mitigated by burning the slash at the landing, hauling it to a nearby rock pit, or hauling it to a nearby rock pit and burning it.

44 ACRES

Shady DN-FONSI

UNIT 25



Riparian Management Area

TTRA Buffer

Existing Managed Stands

State Selected Lands

High Hazard Soils

Inventoried Roadless Area

Lakes

Marten Guidelines Apply

Existing Roads

Existing-drivable

Closed

Unmaintained

Proposed New Temporary Roads

Proposed Unit

Adjacent Proposed Units

Stream AHMU-Class

I

II

III

IV

N

0 125 250 500 750 1,000 Feet

Date Last Edited : July 29, 2004

Acres	Prescription	Harvest System	New Roads
44	Clearcut with Reserves	Cable	None

Volstrata Acres:	Low: <u>1</u>	Medium: <u>21</u>	High: <u>42</u>	Net Volume (MBF/Acre): <u>21 MBF</u>
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Unit Development & Stand Description:

The current stand is an over-mature, multi-layered stand that has resulted from gap-phased stand initiation caused by mortality of overstory trees. Current stand composition is approximately 85% western and mountain hemlock and 15% Sitka spruce. The stand consists of a large component of highly-defective trees, particularly in the western hemlock. The understory is fully stocked with western hemlock advanced regeneration. Net volume growth is static or declining due to mortality and decay.

Stand Management Objectives:

Even-aged regeneration harvest using conventional cable yarding systems. Future stand structure will be primarily even-aged with some overstory trees retained for wildlife and biodiversity purposes.

Natural regeneration is expected. Future treatments may include precommercial thinning and timber stand improvement to enhance forest health and timber management objectives.

Water Quality and Fisheries

Concern: One Class IV stream channel located in the central portion of Unit 26 that flows west to east.

Mitigation: Avoid pulling logs down the stream channel. Split yard to either side of the stream if possible, or provide at least partial suspension across Class IV stream.

Soils

Concern: Highly erosive cutslopes along road.

Mitigation: Revegetate disturbed cutslopes in a timely manner. Buttress sandy slopes if necessary to facilitate establishment of vegetation and reduce sedimentation. Implement BMP 12.17.

Wildlife:

Concern: High value marten habitat. Raptor observations in vicinity. Marbled murrelet observations. High value deer winter habitat. Wildlife corridor values.

Mitigation: Retain at least 7 trees >20 inches DBH (4 live trees and 3 decadent trees) per acre and at least 3 pieces of downed woody material (>20 inches diameter at large end and 10 feet long) per acre to meet Forest Plan Marten Standards. If eggshell fragments or nests are located, flag nearest tree and report to wildlife biologist. Protect raptor nests with a forested 600-foot wind-firm buffer and prevent disturbance from March 1 through July 31 to meet Forest Plan Raptor Standards. Protect marbled murrelet nests with a 600-foot wind-firm buffer and minimize disturbance activities from May 1 through June 15 to meet Forest Plan Marbled Murrelet Standards. Wildlife corridor and deer winter habitat concerns will be mitigated by marten retention and additional retention wherever possible.

Visuals:

Concern: Unit is located along visual priority route (FDR #6270) within the Timber Management LUD. Meet the Modification VQO in the foreground from priority use route. Unit boundary is parallel with road for approximately 1/2 mile.

Mitigation: Leave a series of variable width leave strips between each of the 3-5 landings located along the road. The unit would be yarded to each of these landings in a radial pattern. The leave areas between the landings would be roughly wedge-shaped with the apex of the wedge strip being a maximum of 300 to 400 feet wide then tapering to a lesser width at each landing. Impacts of logging slash at landings would be mitigated by burning the slash at the landing, hauling it to a nearby rock pit, or hauling it to a nearby rock pit and burning it.

64 ACRES

Shady DN-FONSI

UNIT 26



Riparian Management Area

- TTRA Buffer
- Existing Managed Stands
- State Selected Lands
- High Hazard Soils
- Inventoried Roadless Area
- Lakes
- Marten Guidelines Apply

Existing Roads

- Existing-drivable
- Closed
- Unmaintained
- Proposed New Temporary Roads
- Proposed Unit
- Adjacent Proposed Units

Stream AHMU-Class

- I
- II
- III
- IV

0 250 500 1,000 1,500 2,000 Feet



Date Last Edited : July 29, 2004

Sub-units	Acres	Prescription	Harvest System	New Roads
B	64	Clearcut with Reserves	Cable	None

Volstrata Acres:	Low: <u>0</u>	Medium: <u>0</u>	High: <u>31</u>	Net Volume (MBF/Acre): <u>22 MBF</u>
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Unit Development & Stand Description:

The current stand is an over-mature multi-layered stand that has resulted from gap-phased stand initiation caused by mortality of overstory trees. Current stand composition is approximately 95% western hemlock and 5% Sitka spruce. The stand consists of a large component of highly-defective trees, particularly in the western hemlock. The understory is fully stocked with western hemlock advanced regeneration. Net volume growth is static or declining due to mortality and decay.

Stand Management Objectives:

Even-aged regeneration harvest using conventional cable yarding systems. Future stand structure will be primarily even-aged with some overstory trees retained for wildlife and biodiversity purposes.

Natural regeneration is expected. Future treatments may include precommercial thinning and timber stand improvement to enhance forest health and timber management objectives.

Water Quality and Fisheries

Concern: Erosive cut-slopes have been identified along the 6573 road and may contribute sediment directly to the stream channel.

Mitigation: Apply BMPs 12.4, 12.6, 12.6a, 13.9, and 13.16. Unit will require layout review to exclude side-slopes to Class III streams. Directional fall and split yard away from the two Class III streams located in the N-Central unit portion. No programmed commercial timber harvest within the Riparian Management Area, defined as the V-notch (side-slope break). Manage an appropriate distance beyond the no-harvest zone to provide for a reasonable assurance of windfirmness of the Riparian Management Area (pay special attention to the area within one site-potential tree height, 120 feet, of the Riparian Management Area). Fall and yard away from the stream located along the far northern edge and within the N-Central Unit portion.

Soils

Concern: Erosive cutslopes along road.

Mitigation: Revegetate disturbed cutslopes in a timely manner. Buttress sandy slopes if necessary to facilitate establishment of vegetation and reduce sedimentation.

Wildlife:

Concern: High value marten habitat. Marbled murrelet observations. High value deer winter habitat. Wildlife corridor values.

Mitigation: Retain at least 7 trees >20 inches DBH (4 live trees and 3 decadent trees) per acre and at least 3 pieces of downed woody material (>20 inches diameter at large end and 10 feet long) per acre to meet Forest Plan Marten Standards. If eggshell fragments or nests are located, flag nearest tree and report to wildlife biologist. Protect raptor nest with a forested 600-foot wind-firm buffer and prevent disturbance from March 1 through July 31 to meet Forest Plan Raptor Standards. Protect marbled murrelet nests with a 600-foot wind-firm buffer and minimize disturbance activities from May 1 through June 15 to meet Forest Plan Marbled Murrelet Standards. Wildlife corridor and deer winter habitat concerns will be mitigated by marten retention and additional retention wherever possible.

Visuals:

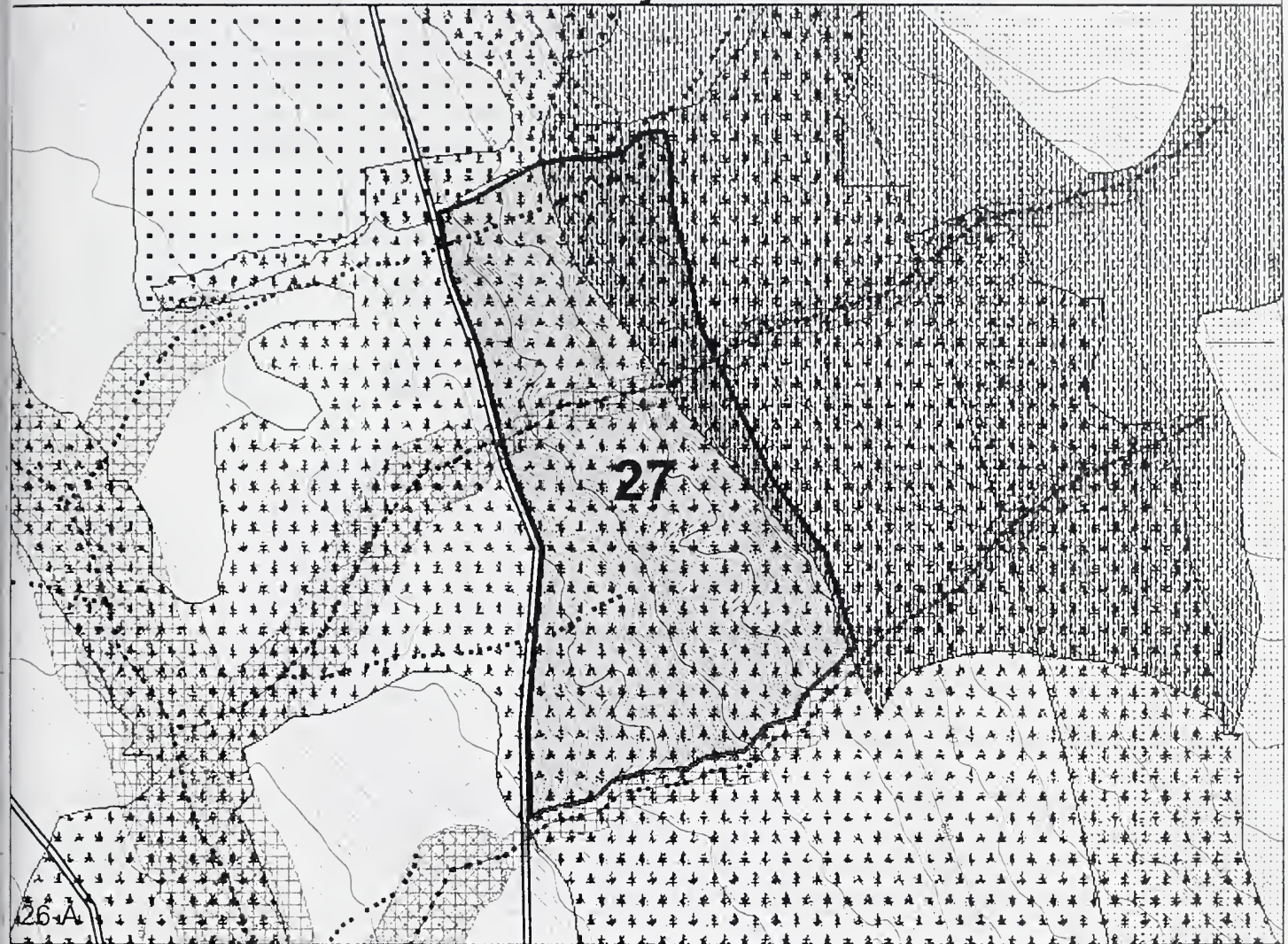
Concern: No Concern

Mitigation: None

31 ACRES

Shady DN-FONSI

UNIT 27



Riparian Management Area

TTRA Buffer

Existing Managed Stands

State Selected Lands

High Hazard Soils

Inventoried Roadless Area

Lakes

Marten Guidelines Apply

Existing Roads

Existing-drivable

Closed

Unmaintained

Proposed New Temporary Roads

Proposed Unit

Adjacent Proposed Units

Stream AHMU-Class

I

II

III

IV

0 125 250 500 750 1,000 Feet



Date Last Edited : July 29, 2004

Acres	Prescription	Harvest System	New Roads
31	Clearcut with Reserves	Cable	None

Volstrata Acres:	Non-CFL: <u>3</u>	Low: <u>6</u>	Medium: <u>13</u>	High: <u>0</u>	Net Volume (MBF/Acre): <u>17 MBF</u>
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Unit Development & Stand Description:

The current stand is an over-mature, multi-layered stand that has resulted from gap-phased stand initiation caused by mortality of overstory trees. Current stand composition is approximately 90% western and mountain hemlock, 7% Sitka spruce, 2% western redcedar, and 1% Alaska yellow-cedar. The stand consists of a large component of highly-defective trees, particularly in the western hemlock. The understory is fully stocked with western hemlock advanced regeneration. Net volume growth is static or declining due to mortality and decay. This unit contains 3 acres that is classified in GIS as non-Commercial Forest Land (non-CFL). This non-CFL area will be reviewed and updated if needed, during layout.

Stand Management Objectives:

Even-aged regeneration harvest using conventional cable yarding systems. Future stand structure will be primarily even-aged with some overstory trees retained for wildlife and biodiversity purposes.

Natural regeneration is expected. Future treatments may include precommercial thinning and timber stand improvement to enhance forest health and timber management objectives.

Water Quality and Fisheries

Concern: One Class IV stream channel is present within the unit.

Mitigation: Split yard where possible or provide at least partial suspension across the stream channel.

Soils

Concern: Steep slopes in eastern part of the unit.

Mitigation: Provide full suspension where possible and provide at least partial suspension on slopes greater than 70%

Wildlife:

Concern: Raptor observation. Marbled murrelet activity.

Mitigation: If eggshell fragments or nests are located, flag nearest tree and report to wildlife biologist. Protect raptor nests with a forested 600-foot wind-firm buffer and prevent disturbance from March 1 through July 31 to meet Forest Plan Raptor Standards. Protect marbled murrelet nests with a 600-foot wind-firm buffer and minimize disturbance activities from May 1 through June 15 to meet Forest Plan Marbled Murrelet Standards.

Visuals:

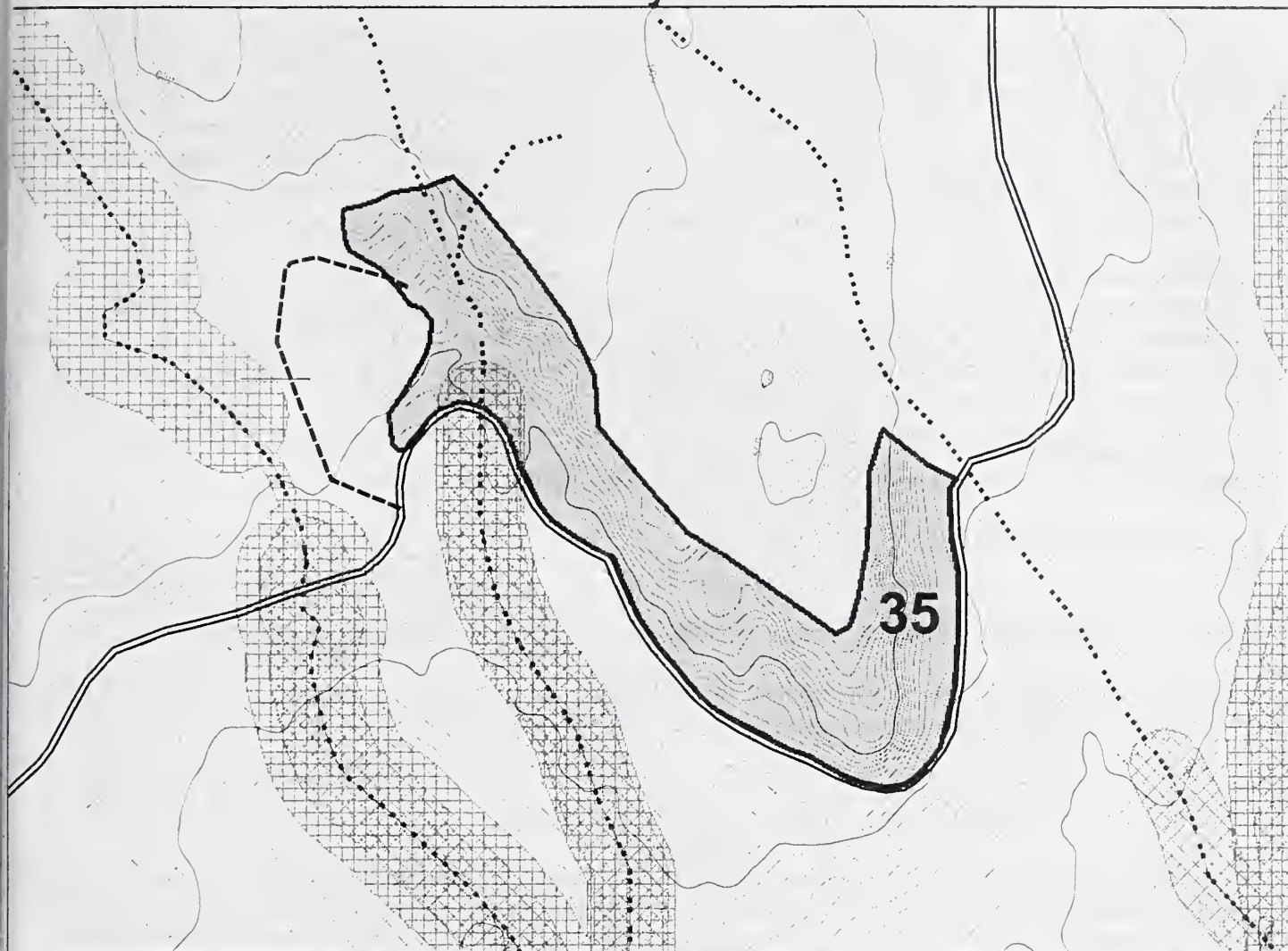
Concern: Unit is located along visual priority route (FDR #6270) within the Timber Management LUD. Meet the Modification VQO in the foreground from priority use route. Unit boundary is parallel with road for approximately 1/2 mile.

Mitigation: Mitigate the impacts of this harvest by leaving a series of variable width leave strips between each of the 3-5 landings located along the road. The unit would be yarded to each of these landings in a radial pattern. The leave areas between the landings would be roughly wedge-shaped with the apex of the wedge strip being roughly 150 feet wide then tapering to a lesser width at each landing. Impacts of logging slash at landings would be mitigated by burning the slash at the landing, hauling it to a nearby rock pit, or hauling it to a nearby rock pit and burning it.

22 ACRES

Shady DN-FONSI

UNIT 35



Riparian Management Area

Existing Roads

Stream AHMU-Class

X TTRA Buffer

— Existing-drivable

..... I

Existing Managed Stands

— Closed

..... II

State Selected Lands

----- Unmaintained

..... III

High Hazard Soils

--- Proposed New Temporary Roads

..... IV

Inventoried Roadless Area

Proposed Unit

Adjacent Proposed Units

Lakes

Marten Guidelines Apply

0 125 250 500 750 1,000 Feet



Date Last Edited : July 29, 2004

Acres	Prescription	Harvest System	New Roads
22	Clearcut with Reserves	Cable	0.24 miles temporary

Volstrata Acres:	Low: <u>0</u>	Medium: <u>1</u>	High: <u>16</u>	Net Volume (MBF/Acre): <u>21 MBF</u>
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Unit Development & Stand Description:

The current stand is two-aged with an overstocked younger cohort of nearly 100% western hemlock ranging in age of 80- to 120-years, and a scattered older cohort of large Sitka spruce 250+ years of age. This stand resulted from a previous landslide or possibly large-scale blowdown. Current stand composition is approximately 99% western hemlock, 1% Sitka spruce, and a minor component of Alaska yellow-cedar. The younger cohort is severely overstocked resulting in competition-induced mortality. The understory is fully stocked with western hemlock advanced regeneration. However, any new growing space created due to mortality will most likely be occupied by the 80-120 year old cohort. Net volume growth is increasing, but is well below the site potential due to overstocking.

Stand Management Objectives:

Even-aged regeneration harvest using conventional cable yarding systems. Future stand structure will be primarily even-aged with some overstory trees retained for wildlife and biodiversity purposes.

Natural regeneration is expected. Future treatments may include precommercial thinning and timber stand improvement to enhance forest health and timber management objectives.

Water Quality and Fisheries

Concern: Extensive cut slope erosion located at bottom of unit boundary that parallels the road.

Mitigation: Implement BMPs 13.11, 13.14, and 13.17

Soils

Concern: Existing road has slumping/eroding cutslopes. Yarding across it will greatly increase the amount of erosion.

Mitigation: Avoid yarding over existing slump. Revegetate disturbed cutslopes in a timely manner. Buttress slopes if necessary to facilitate establishment of vegetation and reduce sedimentation. Implement BMP 12.17.

Wildlife:

Concern: High value marten habitat. Raptor observations in vicinity.

Mitigation: Retain at least 7 trees >20 inches DBH (4 live trees and 3 decadent trees) per acre and at least 3 pieces of downed woody material (>20 inches diameter-at large end and 10 feet long) per acre to meet Forest Plan marten standards. If eggshell fragments or nests are located, flag nearest tree and report to wildlife biologist. Protect raptor nests with a forested 600-foot wind-firm buffer and prevent disturbance between March 1 and July 31 to meet Forest Plan Raptor Standards.

Visuals:

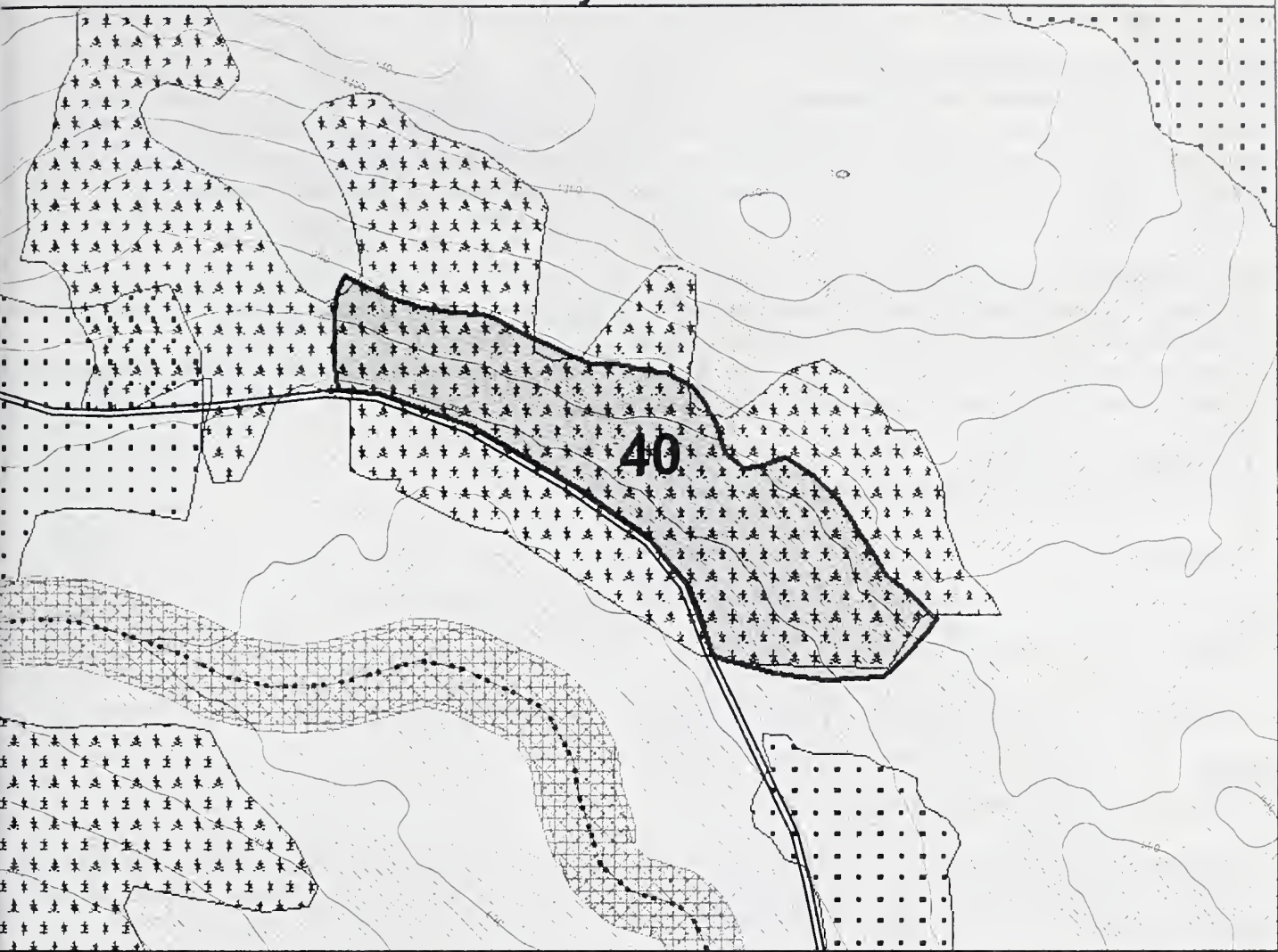
Concern: No concern

Mitigation: None

17 ACRES

Shady DN-FONSI

UNIT 40



Riparian Management Area

× TTRA Buffer

Existing Managed Stands

State Selected Lands

High Hazard Soils

Inventoried Roadless Area

Lakes

Marten Guidelines Apply

Existing Roads

Existing-drivable

Closed

Unmaintained

Proposed New Temporary Roads

Proposed Unit

Adjacent Proposed Units

Stream AHMU-Class

I

II

III

IV

0 125 250 500 750 1,000 Feet

N

Date Last Edited : July 29, 2004

Acres	Prescription	Harvest System	New Roads
17	Clearcut with Reserves	Cable	None

Volstrata Acres:	Low: <u>1</u>	Medium: <u>5</u>	High: <u>0</u>	Net Volume (MBF/Acre): <u>18 MBF</u>
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Unit Development & Stand Description:
 The current stand is an over-mature multi-layered stand that has resulted from gap-phased stand initiation caused by mortality of overstory trees. Current stand composition is approximately 65% western and mountain hemlock, 10% Sitka spruce, and 25% Alaska yellow-cedar. The stand consists of a large component of highly-defective trees, particularly in the western hemlock. The understory is fully stocked with western hemlock and Alaska yellow-cedar advanced regeneration. Net volume growth is static or declining due to mortality and decay.

Stand Management Objectives:
 Even-aged regeneration harvest using conventional cable yarding systems. Future stand structure will be primarily even-aged with some overstory trees retained for wildlife and biodiversity purposes.
 Natural regeneration is expected. Future treatments may include precommercial thinning and timber stand improvement to enhance forest health and timber management objectives.

Water Quality and Fisheries
Concern: No concerns within this unit.
Mitigation: None

Soils
Concern: Steep slopes.
Mitigation: Achieve full suspension where feasible, and at least partial suspension on slopes greater than 70%.

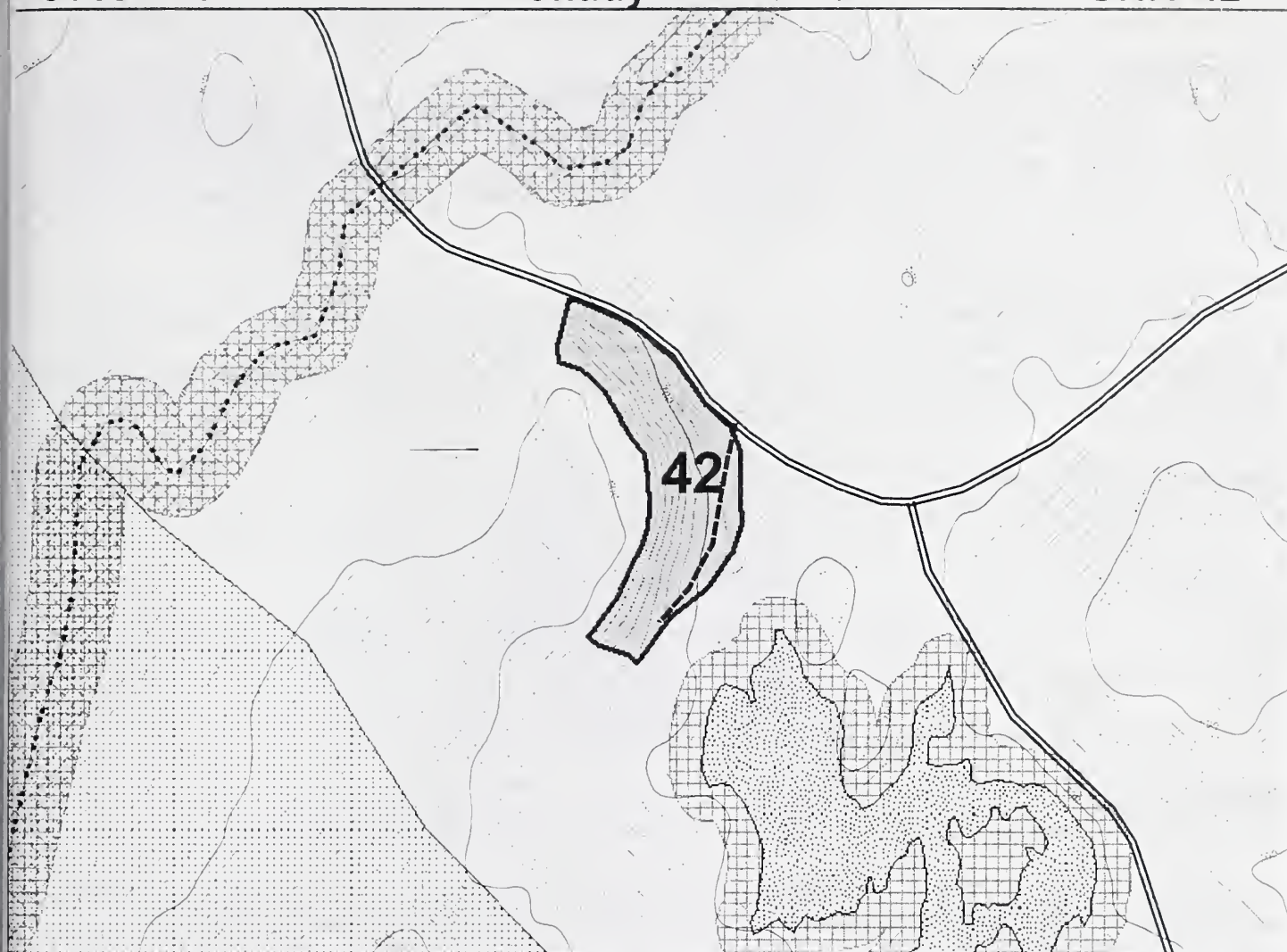
Wildlife:
Concern: Possible raptor observation.
Mitigation: If eggshell fragments or nests are located, flag nearest tree and report to wildlife biologist. Protect raptor nests with a forested 600-foot wind-firm buffer and prevent disturbance from March 01 through July 31 to meet Forest Plan Raptor Standards.

Visuals:
Concern: None
Mitigation: None








6 ACRES

Shady DN-FONSI







UNIT 42



Riparian Management Area

-  TTRA Buffer
-  Existing Managed Stands
-  State Selected Lands
-  High Hazard Soils
-  Inventoried Roadless Area
-  Lakes
-  Marten Guidelines Apply

Existing Roads

-  Existing-drivable
-  Closed
-  Unmaintained
-  Proposed New Temporary Roads
-  Proposed Unit
-  Adjacent Proposed Units

Stream AHMU-Class

-  I
-  II
-  III
-  IV



0 125 250 500 750 1,000 Feet

Date Last Edited : July 29, 2004

Acres	Prescription	Harvest System	New Roads
6	Clearcut with Reserves	Cable	0.12 miles temporary

Volstrata Acres:	Low: <u>0</u>	Medium: <u>3</u>	High: <u>10</u>	Net Volume (MBF/Acre): <u>21 MBF</u>
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Unit Development & Stand Description:

The current stand is an over-mature multi-layered stand that has resulted from gap-phased stand initiation caused by mortality of overstory trees. Current stand composition is approximately 95% western hemlock and 5% Sitka spruce. The stand consists of a large component of highly-defective trees, particularly in the western hemlock. The understory is fully stocked with western hemlock advanced regeneration. Net volume growth is static or declining due to mortality and decay.

Stand Management Objectives:

Even-aged regeneration harvest using conventional cable yarding systems. Future stand structure will be primarily even-aged with some overstory trees retained for wildlife and biodiversity purposes.

Natural regeneration is expected. Future treatments may include precommercial thinning and timber stand improvement to enhance forest health and timber management objectives.

Water Quality and Fisheries

Concern: No concerns within this unit.

Mitigation: None

Soils

Concern: Tall sedge wetlands north of the unit.

Mitigation: Place harvest unit boundary and road outside of tall sedge wetlands.

Wildlife:

Concern: High value marten habitat. Raptor observations in vicinity. Marbled murrelet activity.

Mitigation: Retain at least 7 trees >20 inches DBH (4 live trees and 3 decadent trees) per acre and at least 3 pieces of downed woody material (>20 inches diameter at large end and 10 feet long) per acre to meet Forest Plan Marten Standards. If eggshell fragments or nests are located, flag nearest tree and report to wildlife biologist. Protect raptor nests with a forested 600-foot wind-firm buffer and prevent disturbance from March 1 through July 31 to meet Forest Plan Raptor Standards. Protect marbled murrelet nests with a 600-foot wind-firm buffer and minimize disturbance activities from May 1 through June 15 to meet Forest Plan Marbled Murrelet Standards.

Visuals:

Concern: Unit is located along a Visual Priority Route (FDR #6271) within the Timber Management LUD. Unit is also in close proximity to the Long Lake Trail (#574) which is a hiking trail listed in the Forest Plan as a Visual Priority Route. Meet the Modification VQO in the foreground from priority routes and use areas, and meet the Maximum Modification VQO in the middle and background. Unit boundary is about 125 feet from Long Lake Trail at its closest point.

Mitigation: District Recreation Technician should be contacted when logging is in progress to mitigate impact to recreation users of trail.

13 ACRES

Shady DN-FONSI

UNIT 46



Riparian Management Area

TTRA Buffer

Existing Managed Stands

State Selected Lands

High Hazard Soils

Inventoried Roadless Area

Lakes

Marten Guidelines Apply

Existing Roads

Existing-drivable

Closed

Unmaintained

Proposed New Temporary Roads

Proposed Unit

Adjacent Proposed Units

Stream AHMU-Class

I

II

III

IV

0 125 250 500 750 1,000 Feet



Date Last Edited : July 29, 2004

Acres	Prescription	Harvest System	New Roads
13	Clearcut with Reserves	Cable	0.09 miles temporary

Volstrata Acres:	Non-CFL: <u>6</u>	Low: <u>1</u>	Medium: <u>32</u>	High: <u>4</u>	Net Volume (MBF/Acre): <u>19 MBF</u>
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Unit Development & Stand Description:

The current stand is an over-mature multi-layered stand that has resulted from gap-phased stand initiation caused by mortality of overstory trees. Current stand composition is approximately 66% western hemlock, 17% Alaska yellow-cedar, and 17% Sitka spruce. The stand consists of a large component of highly-defective trees, particularly in the western hemlock. The understory is fully stocked with western hemlock advanced regeneration. Net volume growth is static or declining due to mortality and decay. This unit contains 6 acres that is classified in GIS as non-Commercial Forest Land (non-CFL). This non-CFL area will be reviewed and updated if needed, during layout.

Stand Management Objectives:

Even-aged regeneration harvest using conventional cable yarding systems. Future stand structure will be primarily even-aged with some overstory trees retained for wildlife and biodiversity purposes.

Natural regeneration is expected. Future treatments may include precommercial thinning and timber stand improvement to enhance forest health and timber management objectives.

Water Quality and Fisheries

Concern: A small section of Class II, HC2 fish habitat located at the NE corner of the unit boundary upstream of RCS milepost 0.624. Upstream of Class II break, stream becomes Class III forming the edge of the unit boundary. Three other Class IV streams are present in Unit 60.

Mitigation: A 120 foot no-cut buffer will be applied to the Class II stream. Additionally, manage an appropriate distance beyond the no-harvest zone to provide for a reasonable assurance of windfirmness of the Riparian Management Area (pay special attention to the area within one site-potential tree height of the Riparian Management Area). Provide full suspension where possible and provide at least partial suspension across Class IV streams. Apply BMPs 12.6, 12.6a, 13.9, and 13.16. Unit will require layout review to exclude side-slopes to class three streams.

Soils

Concern: No issues.

Mitigation: None.

Wildlife:

Concern: High value marten habitat. Observations indicate a high probability of red-tailed hawk nesting activity along western portion of unit. Sharp-shinned hawk nest located north and outside of unit boundary. Marbled murrelet activity.

Mitigation: Retain at least 7 trees >20 inches DBH (4 live trees and 3 decadent trees) per acre and at least 3 pieces of downed woody material (>20 inches diameter at large end and 10 feet long) per acre to meet Forest Plan Marten standards. If eggshell fragments or nests are located, flag nearest tree and report to wildlife biologist. Protect raptor nests with a forested 600-foot wind-firm buffer and prevent disturbance from March 1 through July 31 to meet Forest Plan Raptor Standards. Protect marbled murrelet nests with a 600-foot wind-firm buffer and minimize disturbance activities from May 1 through June 15 to meet Forest Plan Marbled Murrelet Standards.

Visuals:

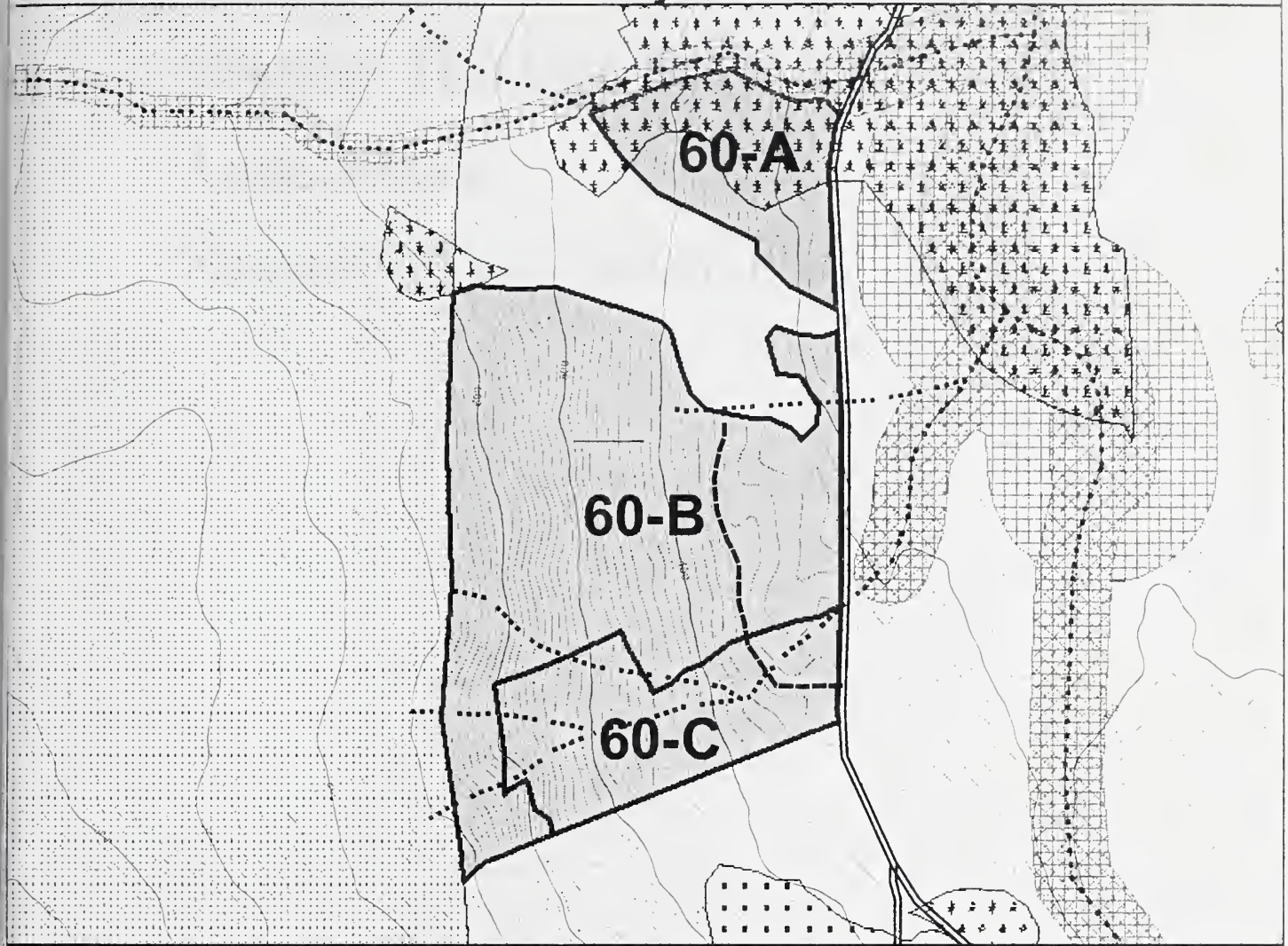
Concern: Unit is located along a Visual Priority Route (FDR #6270) within the Timber Management LUD. Meet the Modification VQO in the foreground from priority use route. Unit boundary is parallel with road for approximately 1/3 mile, with a leave strip between 60A and 60B.

Mitigation: Retain a leave strip in Unit 60B that is at least 250-300 feet wide along the road. A spur into the unit behind the leave area will take off from the main road through this opening. The actual width of the strip will be based on what is needed to visually screen the evidence of harvest in the unit.

43 ACRES

Shady DN-FONSI

UNIT 60



Riparian Management Area

TTRA Buffer

Existing Managed Stands

State Selected Lands

High Hazard Soils

Inventoried Roadless Area

Lakes

Marten Guidelines Apply

Existing Roads

Existing-drivable

Closed

Unmaintained

Proposed New Temporary Roads

Proposed Unit

Adjacent Proposed Units

Stream AHMU-Class

I

II

III

IV

N



0 125 250 500 750 1,000 Feet



Date Last Edited : July 29, 2004

Sub-units	Acres	Prescription	Harvest System	New Roads
A, B & C	43	Clearcut with Reserves	Cable	0.19 miles temporary

Shady Timber Sale

Appendix 2

Response to Comments

Appendix 2

Response to Comments

Introduction

This appendix contains the responses to all substantive written comments received during the 30-day comment period for the Shady Timber Sale Environmental Assessment (EA).

The individual annotated letters are part of the project planning record. To facilitate responding to these letters, each letter was annotated according to the concern(s) it addressed. The Interdisciplinary Team (IDT) thoroughly and objectively read, analyzed, and responded to every substantive issue or concern.

Four comment letters and one e-mail were received from organizations or individuals regarding the Shady Timber Sale EA. An annotation acronym identifying the letter's source is listed below.

CWP: Comment letter from Gabriel Scott, Alaska Field Representative – Cascadia Wildlands Project.

DNR: E-mail from Ron Shonenbach – Department of Natural Resources.

SEA: Comment letter from Michele Metz, Assistant Land Manager- Sealaska Corporation.

SAC: E-mail comment from B. Sachau – Florham Park, NJ.

PRI: Comment letter from William Privett, President – Wrangell Oil Inc..

Comment letter from Gabriel Scott, Alaska Field Representative – Cascadia Wildlands Project.

CWP-1: *We support the “no-action” alternative. The EA is insufficient, and does not justify the FONSI. If this project moves ahead, please prepare a full EIS.*

Response: The Findings and Disclosures section (EA, Section 3.16) reveal no significant findings. Chapter 3 of the EA discloses the effects of the alternatives on the human and physical environments. We think that the Shady EA supports the FONSI for the reasons outlined in FONSI-2 through FONSI-5.

CWP-2: *There is no need for the Forest Service to offer any more old-growth timber sales, in the Tongass or anywhere else. Uneconomic old-growth sales like this one do not meet the stated need to provide wood for society's needs or contribute to the Southeast Alaska economy. We support a sustainable logging economy in this area, but existing managed stands and opportunistic small sales should be sufficient. It should not fall on the public to sacrifice what precious little native forest is left on our public wildlands.*

Response: According to the economic analysis done using NEPA Economic Analysis Tool (NEAT), Alternatives 2 and 3 are positive for 9 of the last 12 appraisal quarters (Timber Resource Report, pg. 23). Given the fact that timber markets have shifted \$35 per CCF over the last three years (2000-2003), the alternatives could provide positive offerings within a three-year time period.

The existing managed stands in the Shady Project Area were harvested between 1981 and 1995 and are not suitable and available for timber harvest at this time.

We have determined that the Shady Timber Sale would provide an opportunity to provide a small timber sale or sales.

CWP-3: *The two "key issues" listed in the EA, Economics and Wildlife travel corridors, are insufficient. How were these key issues selected?*

Response: As stated on page 1-6 in the EA under Key Issues, the key issues were identified from public and internal scoping. Two public scopings occurred between July 2000 and May 2002. A project update letter was sent out in December 2003. While the project update letter was not formal scoping, we did receive a few comments. The comments did not contain any new issues. Therefore, we believe these two key issues are sufficient.

CWP-4: *The proposed action would have significant impacts to wildlife habitat, affecting biodiversity and ecosystem health. Significant impacts to wildlife should be evaluated as a significant issue in the EIS. While we thank you for analyzing habitat connectivity and travel corridors, it is very dangerous to substitute that for analysis of the impact of loss of habitat. For example, Fahrig (1997) writes:*

"Results indicate that the effects of habitat loss far outweigh the effects of habitat fragmentation... [I]n fact, details of how habitats are arranged cannot usually mitigate the risks of habitat loss. Conservation efforts should be aimed foremost at stopping habitat loss..." (J. Wildl. Manage. 61(3):603-610. 1997)

Response: We did not substitute habitat connectivity and travel corridors analysis for habitat analysis. Sections 3.2.1 and 3.2.2 of the Shady EA discuss effects to habitats. In addition, the effects of habitat loss are discussed for particular species including goshawk, deer, marten, and marbled murrelets (Section 3.2.7.1, 3.2.8.1, 3.2.8.3, 3.2.9.1, Tables 3-6 and 3-7). Timber harvest results in temporary habitat modification, not habitat loss. Additional information can be found in the Wildlife Resource Report located in the Shady EA planning record.

CWP-5: *The analysis of cumulative impacts on wildlife (section 3.2.10) is inadequate, and does not support a FONSI. State harvest undermines mitigation measures. Past and future anticipated harvest on Forest Service land, and a very high density of roads, are clearly a significant influence on the ecosystem. The EA suggests simply that logging “may have negative impacts on species dependent on old-growth forest.” (EA, p.2-23) Please conduct a thorough analysis of these impacts in an EIS.*

Response: As stated in the Shady EA (FONSI-4), up to 240 acres of the productive old-growth acres (1.7% of total productive old-growth) could be harvested in the project area.

Of the 26,500 acres in the study area 18,073 acres are not suitable for timber harvest and 1,009 acres are not available for harvest. Therefore, regardless of future activities, 68% (18,073 acres) of the project area will remain unharvested.

We are proposing to construct temporary roads that will be closed following harvest. An interagency group of biologists (USFWS, USFS, ADF&G) discussed road densities as it relates to wolves and martens. It was determined that there were no concerns about excessive human-caused mortality of these species. (EA, Sections 3.2.8.2 and 3.2.8.3). Additional information can be found in the Wildlife Resource Report located in the planning record.

We have taken into consideration the future sales listed in Chapter 3 (EA, pg. 3-1) for cumulative effects analysis and concluded that our analysis of cumulative impacts on wildlife is sufficient.

CWP-6: *What field studies were done in preparation of this EA? I’m sure you agree that up to date, on-ground information is essential for good decision-making. The section on page 1-5 is vague as what’s been done, and suggests that GIS databases were relied on to a great extent. There is often a tendency to over-rely on computer models. Please avoid that pitfall.*

Response: We use GIS as a tool during our analysis. We verify the accuracy of the information contained in the GIS database during fieldwork and update the database as needed. We do not rely on computer models to determine actual numbers or costs associated with the timber sale, but use them to compare alternatives.

Field studies were conducted during the 2000, 2001, and 2002 field seasons. Follow-up surveys were conducted during the 2003 field season. A complete list of the field studies that were done on the Shady Project Area can be found in the resource reports in the planning record. Included among them are:

- Deer “Quick Cruise” surveys;
- plant association determinations;
- goshawk nest surveys;
- raptor surveys;
- marbled murrelet surveys;
- field verification of wildlife corridors;
- field verification of logging system and transportation analysis (LSTA);
- stand exams;
- stream location, classification and mapping;
- And soil map unit verification of order 3 soil survey.

CWP-7: *How was the size of the Project Area arrived at, understanding that it would affect all the statistics as to environmental impacts (e.g. % harvested)?*

Response: The Shady Project Area carried over from the Shady-Highbush project. At the time the project changed from Shady-Highbush to Shady (due to unresolved Roadless Rule issues), over two years of reconnaissance and preliminary analysis had already been completed.

Different scales of analysis are used to calculate statistics including the total project area, the entire island, watersheds, and value comparison units (VCUs). Whenever a percentage is listed it is accompanied by an actual acreage or distance.

CWP-8: *It would be useful to know the economic impacts to the community of Wrangell, rather than just the general figures for the whole southeast region.*

Response: Economic impacts to Wrangell cannot be determined until the sale is awarded. If the sale is awarded to the mill located in Wrangell, then Wrangell will most likely receive the greatest economic benefit.

Economic effects are more realistically determined at a larger scale than a project area. See response to CWP-9.

CWP-9: *Thank you for acknowledging that "costs that are not easily quantifiable" are not recognized in the financial efficiency analysis. (p.3-5) Please make the next step in the EIS, and disclose probable significant economic impacts like opportunity costs, recreation, and non-market benefits.*

Response: The balance of resource use necessary to maintain a viable economic and social environment is not established at any one level in forest planning. Rather, the process begins with long-range planning at the national level, and continues down through the regional and forest levels to the project planning level. The Shady EA is a project-level analysis. It does, however, implement direction provided at higher levels of planning.

The TLMP EIS includes a comprehensive analysis of the economic and social environment in Southeast Alaska, the Tongass National Forest, and the communities within these areas. The Economic and Social environment section of the TLMP EIS includes very detailed information on industries directly dependent upon the forest, including the timber industry and the recreation and tourism industry. The Shady project was designed to implement the Forest Plan.

With regards to the Shady project specifically, the Forest Service Manual (FSM 1970.6) states, in part, that "the responsible line officer determines the scope, appropriate level, and complexity of economic and social analysis needed." The Shady project is a timber sale project, and was proposed to respond to the goals and objectives identified in the Forest Plan for the timber resource and to help move the project area towards the desired future condition identified in the Forest Plan for the lands within the Timber Production, Scenic Viewshed and Old-Growth Habitat LUDs.

CWP-10: *The financial efficiency analysis shows that this sale would not be economic. It therefore seems not to meet the project purpose and need. Obviously there is no utility in preparing timber sales that aren't going to happen. The costs outweigh the benefits, even before counting all the externalized costs (recreation, non-market benefits, wildlife, biodiversity, quality of life, fish, etc.).*

Response: See response to CWP-2 and CWP-9.

CWP-11: *Environmental risks are heightened in uneconomic, or marginally economic, timber sales, because there is added incentive to cut corners. At the very least more monitoring and stricter contract language should be considered.*

Response: The value of the wood does not effect how the contract is prepared and enforced.

CWP-12: *Section 3.2.1 offers inadequate analysis of impacts to riparian habitats. Proposed clearcuts, even where they aren't in designated Riparian Management Areas, would impact riparian habitats. Riparian habitat will not be the same in a landscape of narrow strips of forest along streams, surrounded by managed timber stands and clearcuts. The hydrology changes when watersheds are clear cut, affecting stream flow, timing, distribution of species, nutrients, soils, and host a other factors relevant to riparian habitats. Also, RMAs do not encompass all riparian areas.*

Response: As stated in Section 3.2.1, no harvest will occur in Riparian Management Areas (RMAs) under any alternatives due to protections given under Forest Plan Standards and Guidelines.

In addition, Section 3.9 discusses watershed environment and effects. A watershed sensitivity analysis conducted in 1998 show that watersheds in the Shady Project Area have a low inherent risk of sensitivity to mass movement and sediment transport events. Additional information can be found in the Watershed Resource Report located in the planning record.

CWP-13: *The cumulative impact of state timber sales is significant, and isn't given adequate attention in the EA. A map showing the state selected land would be helpful. Cumulative impacts of state-offered sales are compounded because the state doesn't often consider USFS management direction for areas.*

Response: Chapter 3 of the Shady EA describes the activities that were considered during cumulative effects analysis. Please see the following sections for cumulative effects on specific resources: 3.2.10, 3.3, 3.7, 3.8 and 3.11.

We will be including a map showing State of Alaska lands in the Decision Notice.

CWP-14: *Section 3.2.3, Wildlife Corridors, is clearly insufficient. Mitigation measures and mitigating factors are listed, but the direct, indirect and cumulative effects never are disclosed. Will there be any impact to wildlife corridors? What impact?*

Response: In general, alternatives that leave more forest structure will have less of an effect on wildlife movement than those that leave less structure, but the effect is difficult to measure. One method of measuring this effect is to look at the percentage of volume removed with each alternative. Since volume is a rough measure of forest structure, alternatives that remove more volume will retain less forest structure. See Table 2-1 (EA pg 2-6) and Table 3-4 (EA pg 3-11) for acres and volume harvested under each alternative.

Section 3.2.3 of the EA and the Wildlife Resource Report (planning record) addresses corridor values.

CWP-15: *Were any efforts, such as field studies, made in this analysis to identify wildlife corridors?*

Response: The Wrangell Island Analysis (WIA) identified wildlife corridors on Wrangell Island, several of which fall within the project area. Field surveys confirmed use in these areas by large mammals such as deer, moose, and bears. The Wildlife Resource Report addresses wildlife corridors located within the Project Area (Wildlife Resource Report, page 13).

CWP-16: *The proposed action would have significant impacts to corridors. Specifically, mapped wildlife corridors between old growth reserves run directly through proposed harvest units 25 and 26 (Wrangell Island Analysis, 1998 p.43), while units 27, 60 and 63 also would degrade critical wildlife corridors. This is not disclosed in the EA, which states only that "stream buffers preserve corridor values" and that "Fools Creek riparian corridor is protected under all alternatives." (EA, p.3-12) That isn't true based on the unit cards, which show large clearcuts and road in the Fools Creek RMA.*

Response: There are two small Old-Growth Reserves (OGRs) within the project area and a small and medium OGR adjacent to the project area.

There is no requirement to ensure connectivity among all small reserves or between small reserves and non-development LUDs, including medium and large reserves. However, planning efforts considered opportunities to maintain connectivity.

As the unit cards state, wildlife corridor habitat concerns will be mitigated by retention or patch cuts.

According to the unit cards, there are no harvest units or roads within any Riparian Management Areas in the project area.

CWP-17: *It is far from apparent to us why riparian areas alone provide sufficient wildlife corridors. What is the basis for this assumption? Large cutting units alongside corridors cannot help but degrade their value. Roads sever riparian corridors. Disturbance impacts alone are potentially significant, and should be more fully examined in the EIS.*

Response: Riparian corridors provide connectivity between watersheds, and vertical connectivity between lowland and alpine areas.

There will be no harvest within the Riparian Management Areas.

Riparian Management Areas in conjunction with beach buffers, stream buffers, Old-Growth Reserves, retention within harvest units, and unharvested lands contribute to providing sufficient wildlife corridors.

CWP-18: *It is not apparent that patch cuts in Alternative 3 would preserve corridor or habitat values. There certainly is intuitive sense to the idea, but on closer examination partial cuts aren't much better than clearcuts. More area is disturbed, which can just spread out the impacts. The impact depends on the particular lay of each stand. The EA just takes for granted that these predictions are true, without offering any support.*

Response: Both of the action alternatives provide the necessary habitat to function as corridors. The movement of wildlife is not restricted to the Fools Creek units. There are other corridors available. Our intent is to maintain contiguous habitat to the extent feasible. Alternative 3 addresses this better than Alternative 2. We determined that the use of patch cuts in Units 25, 26, and 27 under Alternative 3 would provide for contiguous habitat as much as possible. Under Alternative 3, 60 percent of the stands in the Fools Creek units (Units 25, 26, and 27) will be retained. The patch locations will be determined during layout. We think that retaining 60 percent of the stands will preserve corridor values by providing contiguous habitat.

CWP-19: *Please include a map of wildlife travel corridors in the EIS. The information is available in the Wrangell Island Analysis, and it would be a great help in displaying impacts to them. Marking important corridors on unit cards would also be useful.*

Response: The corridors that were mapped in Wrangell Island Analysis were a biologist's interpretation of where animals move. Wildlife movement occurs across the project area; it is not restricted to the mapped areas. We have considered your comment. We think that the more information we add to the unit cards, the more difficult they are to interpret.

CWP-20: *The proposed action would significantly reduce connectivity between Old-Growth Reserves. Especially since you are relying so much on Forest Plan conservation strategies, please take additional steps to preserve the value of old-growth reserves.*

Response: See response to CWP-16.

We are taking additional steps to preserve connectivity in both action alternatives by managing fewer acres (in Alternative 2) and using patch cuts in place of clearcuts (in Alternative 3) between the Earl West small OGR and the Fools Creek medium OGR.

CWP-21: *Please evaluate significant impacts to goshawks in an EIS. Thank you for the attention you have given forest raptors, especially the annual surveys, but the EA is inadequate to support a FONSI. Goshawks tend not to migrate, so the fact that an active goshawk nest was located in the project area a few years ago is a very strong indicator that there are still nest(s) around. It is very, very difficult to locate goshawk nests, even with the best survey techniques, so please do not rely only on nest buffers to prevent impacts.*

Response: As stated in Section 3.2.7.1 of the EA, effects will be minimized by Forest Plan Standards and Guidelines, nest protection, habitat available in OGRs, and the amount of habitat remaining in the project area. See Table 3-6 of the EA for amount of acres of high probability goshawk habitat harvested under each alternative. We will continue annual monitoring and if goshawks are detected we will take appropriate action. Additional information can be found in the Wildlife Resource Report (planning record).

CWP-22: *The EA mistakenly says Alternative 3 “would have the least effect on goshawks.” (EA, p. 3-15) Actually Alternative 1, No Action, would have the least affect. Please seriously consider this alternative in the EIS.*

Response: The statement should read, “Of the action alternatives, Alternative 3 would have the least effect on goshawks.”

Alternative 1 would have the least effect of all the alternatives on goshawks. This is further outlined in Table 3-6 (pg 3-15) of the EA.

CWP-23: *The proposed action would have significant impacts to deer. As the EA says, “any additional loss of important deer habitat could reduce the ability of an already depressed population to recover.” (p. 3-19) Please evaluate these impacts in an EIS.*

Response: Browse indications, deer pellet density data, hunter harvest information, and general knowledge show we have a low number of deer on Wrangell Island, but we do not have any research to tell us why. We suspect it is a combination of illegal harvest, predation, hard winters, and low natural habitat capability.

As stated in Section 3.2.8.1 of the EA, “Overall, the effects to deer winter range and habitat capability in the project area or island-wide would be relatively minor”.

CWP-24: *The proposed action would have significant impacts to wolves. Roads, diminished habitat for prey, and disturbance impacts will all be significant, and warrant an EIS.*

Response: The vast majority of wolf mortality in Southeast Alaska is human-caused (Wildlife Resource Report, page 33). As stated in Section 3.2.8.2 of the EA, an interagency group of biologists (USFWS, USFS, and ADF&G) discussed wolf mortality on Wrangell Island in 2003. It was determined that there were no concerns about excessive human-caused wolf mortality on Wrangell Island. Additional information can be found in the Wildlife Resource Report located in the planning record.

CWP-25: *Overall, the FONSI relies far too much on Forest Plan Standards and Guidelines to mitigate impacts to the level of insignificance. Why is this justified?*

Just listing mitigation measures isn't sufficient. Please explain whether or not mitigation measures will work, based on scientific evidence, in an EIS.

Response: The Standards and Guidelines from TLMP were formulated by a science team and were peer-reviewed by members of the academic community outside of the Forest Service. These mitigations, as reflected in the Standards and Guidelines, are monitored to verify their effectiveness in protecting resources. The Forest Service publishes a monitoring report each year that discusses the effectiveness of these guidelines.

CWP-26: *An example of where mitigation apparently will NOT be effective is unit 60. The unit card says there is "high probability of red-tailed hawk nesting activity along western portion of unit," (EA, p.A-16) and a sharp-shinned hawk nest nearby to the north. The nest will only be protected "if eggshell fragments or nests are located." (ibid) How likely is that? Knowing there is a nest over there, isn't it foolish to expect the guy with a chain saw to find and protect it? Please protect these hawks. This sort of impact should be analyzed in the EIS.*

Response: According to the Wildlife Resource Report, the harvest unit in which the nest was located was removed from the unit pool. Though red-tailed hawk nesting activity was suspected along the western portion of Unit 60, survey efforts failed to detect a nest. Additional raptor surveys will be conducted in Unit 60 prior to timber harvest to detect any active raptor nests. If raptor nests are located, the appropriate Forest Plan protection measures will be taken.

CWP-27: *The proposed action will have significant impacts to Marbled Murrelets, especially in upper Fools Creek. It seems probable that murrelet nest trees will be cut down. This is insignificant? Please fully analyze impacts to murrelets in an EIS. Or even better, just drop the upper Fools Creek units.*

Response: As stated in Section 3.2.9.1 of the EA, Forest Plan Standards and Guidelines, in the form of beach buffers and Riparian Management Areas, will protect important Marbled murrelet habitat in the project area, especially lower elevation habitat.

In addition, effects to marbled murrelets will be mitigated by providing a 600-foot wind-firm buffer around each nest and minimizing disturbance activities within this buffer from May 1 – August 15.

CWP-28: *The project would have significant impacts to subsistence, which warrants evaluation in an EIS. Application of the deer habitat capability model alone is not sufficient. The ANILCA 810 finding that "there may be the significant possibility of a significant restriction on subsistence use of deer on Wrangell Island due to cumulative effects" certainly does not support the FONSI.*

Response: Our finding of a significant possibility of a significant restriction on subsistence use of deer on Wrangell Island is based on potential cumulative effects of projects over the life of the Forest Plan, not on the effects of the action alternatives for the Shady project. The key items that led to the finding are:

- The Wrangell Island road system is connected to the community of Wrangell, which could produce unlimited future demand based upon population growth.
- Many hunters would harvest more deer from Wrangell Island if the deer population were higher. Habitat will not be the limiting factor for deer. There might not be enough deer to satisfy the hunting demand at that point in the future.
- The Forest Plan Final EIS indicated that projected demand of all hunters (resident and non-resident) might exceed 10 percent of habitat capability of Wrangell Island by the year 2095.

Based on the above assumptions, all the alternatives, including the no-action alternative, may lead to a significant possibility of a significant restriction on subsistence use of deer on Wrangell Island in the future. This finding is not to be confused with significance as used in the context of NEPA assessments. In response to the finding, a subsistence hearing was held April 27, 2004 in Wrangell, in accordance with Section 810 of ANILCA. No one from the public attended the hearing to give testimony, nor have we received any comments from Wrangell subsistence users that indicate this project would restrict their subsistence uses.

CWP-29: *The EA is incorrect that there will be "no effect to the resources within...roadless areas." (EA, p. 3-33) Unit 60 will clearcut immediately adjacent to an inventoried roadless area, and build roads within 1,000 feet.*

Response: We are not proposing any harvest or road building within Inventoried Roadless Areas.

CWP-30: *The EA fails to disclose impacts to wetlands, beyond listing statistics of acres harvested and miles of road built. What happens to forested wetlands when they are clearcut? Isn't it possible to keep roads and units out of wetlands altogether?*

Response: Harvest on forested wetlands was considered in TLMP 1997. The decision was to not harvest on certain forested wetland soils until a study was completed to determine if these sites were capable of producing at least 20 cubic feet/acre/year (USDA Forest Service defines this as the minimum level of productivity for commercial timberland). The study was completed (Julin, Kent R. and David V. D'Amore, 2003. *Tree Growth on Forested Wetlands of Southeastern Alaska Following Clearcutting*. *Western Journal of Applied Forestry*, vol. 18, no 1, page 30-34). These lands are considered part of the timber base, so it is appropriate to harvest on them. As far as impacts disclosed in the EA, on page 3-36 of the EA, it is stated

that “road construction in wetlands results in a permanent conversion from wetland to non-wetland” (there will be a loss of wetland). Also, “harvest on wetlands is considered a temporary alteration of the existing vegetation”; there are no anticipated impacts on the wetland from timber harvest other than a temporary change in existing vegetation. The Julin study found that stand growth was at or slightly above the growth and yield models used for TLMP.

As stated on page 3-36 of the Shady EA, it is usually impossible to avoid all wetlands in projects that involve road construction. This is due to the large proportion of wetlands in the Southeast Alaska landscape.

It is not possible or desirable to entirely avoid locating roads in wetlands. To attempt to do so would result in many more miles of roads needing to be constructed. Due to the rugged topography they would cross, the potential for environmental impacts would be higher.

CWP-31: *Section 3.9 of the EA is misleading when it says “no new riparian harvest is allowed under the Forest Plan.” (EA, p.3-40) Actually, the Forest Plan only protects the highest value riparian areas, and only to a certain degree. Many small and ephemeral streams will be clearcut, as will the buffer around Fools Creek (at unit 26). Also, the 20% threshold identified in the Forest Plan is not for “significant” impacts, but should be seen as a fairly uncommon and extreme step. Even though they represent a relatively small percentage of the watershed, proposed harvest units would have significant impacts on watersheds. Changes in hydrology, species composition, LWD, water temperature, soils, nutrient availability, etc. are documented effects of logging on watersheds. Please evaluate these impacts in an EIS.*

Response: Riparian Management Areas are specific areas delineated in the Forest Plan to provide for the management of riparian resources. Specific Standards and Guidelines, by stream process group, are associated with riparian management areas. Under the Forest Plan, harvest is not allowed within the Riparian Management Area. Standards and Guidelines also provide for managing an appropriate distance beyond the no-harvest zone to provide for a reasonable assurance of windfirmness of the Riparian Management Area.

Exceeding the 20 percent threshold requires the Forest Service to complete a more intensive watershed analysis.

Table 3-13 of the EA shows the cumulative percent of watershed harvested under each alternative. We have determined that the change in percent harvested is not significant. Additional information can be found in the Watershed Resource Report located in the planning record.

CWP-32: *Regarding unit 25, the southeast portion bordering the stream seems like an unnecessary addition, especially since there are concerns for soil disturbance. Couldn't watershed impacts be alleviated by dropping this portion? This stand has very high values for wildlife, and should be left alive.*

Response: The TTRA buffer shown on the unit card is a mapping error. This is a Class IV stream and does not require a TTRA buffer. The mitigation listed on the unit card is sufficient to protect this stream.

CWP-33: *Unit 26 is probably the most troubling of the entire sale. It is in the wildlife corridor between old-growth reserves, in the Fools Creek riparian area, raises concerns about soil erosion, raptors and murrelets have been observed living there, and it is apparently also high value marten and deer habitat. Please drop this unit.*

Response: We have determined that the mitigation measures and harvest prescription listed on the unit card (Shady EA, page A-4) have addressed these issues.

CWP-34: *Regarding unit 27, why can't the high hazard soils be avoided? The mitigation listed on the unit card is insufficient to protect water quality and habitat values of the four streams within or adjacent to this unit. What does the unit card mean when it says: "identified sedimentation into the Class III stream channel located along the western unit edge and noted."? This unit also has high corridor and habitat values, and the land would thank you to leave it alone.*

Response: We believe the location of high hazard soils is a mapping error. During implementation, we will place the unit outside of the high hazard soils and correct the mapping error as necessary.

The water quality and fisheries concern for Unit 27 was misstated. It will be changed in the Decision Notice Unit Cards to read, "Erosive cut-slopes have been identified along the 6573 Road and may contribute sediment directly to the stream channel." The mitigation measures listed and BMPs address this site-specific sediment concern.

As stated in the unit card, wildlife corridor and habitat concerns will be mitigated by retention.

CWP-35: *Regarding unit 35, that seems like a lot of road to build just to get at a little timber on the west side of the creek. Wouldn't it be more efficient to just harvest along the existing road? Why can't harvest on slopes over 70% be avoided? Since raptors and murrelets have been seen in the unit, please don't wait on the timber fellers to identify nest trees. Forest Service biologists should continue to survey these units to identify nest trees.*

Response: The proposed temporary road would be used to harvest the portion of the unit immediately to the west and east of the Class IV stream. We would not yard to the existing road in this area because it would result in yarding logs down the stream channel. At the point where the unit narrows, we will be yarding to the existing road system.

Results of an on-site evaluation showed low risk of mass movement due to harvesting this unit. Full suspension will protect surface organic material.

We do not wait on timber fellers to identify nest trees. Forest Service biologists detected marbled murrelets in conjunction with early morning goshawk "Valley watch"/listening stations. Formal murrelet surveys were conducted in 2002. Nests are difficult to locate and few have been found in Southeast Alaska. If nests are detected, appropriate actions will be taken.

CWP-36: *Regarding unit 40, we are concerned with the “extensive cut slope erosion” at the bottom of the unit along the road, and possibility that “yarding across it will greatly increase...erosion.” (EA, p.A-10) Please do more than “avoid” doing that—require it.*

Response: The cut slope erosion is located along a 250 foot stretch of the road. As stated in the unit card, we will “avoid yarding over existing slope”. During layout, landings will be located to avoid the slumping cut slope.

CWP-37: *Regarding unit 42, why can't the slopes over 70% be avoided?*

Response: The steep slopes are small inclusions within the unit. Partial suspension will protect the surface organic material. It is not likely that harvesting this unit will cause a landslide.

CWP-38: *Unit 60 should be dropped to protect corridor values, roadless areas, raptors living in the area, and watershed health.*

Response: We have determined that the mitigation measures listed on the unit card (Shady EA, page A-16) will address these concerns.

CWP-39: *Thank you for thoughtfully considering these comments.*

Response: You're welcome. Thank you for your comment.

E-mail comments from Ron Schonenbach - Department of Natural Resources, State of Alaska.

DNR-1: *We received a copy of the Shady EA and when looking at the alternative maps, the project area boundary includes 3,500 acres of state patented land. This state selection has been on the books for a number of years and on the MTP, yet the FS maps make no reference. The patent does reserve various FDR's, a material site and an upland storage/rec. site. While the EA has no effect on state land nor are there any cutting units, I am concerned of this inaccuracy. Please explain the omission.*

Response: The omission from the maps in the EA was an inadvertent mistake. The EA does mention the State Lands in several places, including on pages 1-3, 3-11, 3-15, 3-25, and 3-30. A map showing State Lands will be included in the Decision Notice. Thank you for your comment.

Comment letter from Michele Metz, Assistant Land Manager - Sealaska Corporation

SEA-1: *Sealaska Corporation has reviewed the Shady Timber Sale Environmental Assessment dated March 2004. Sealaska Corporation agrees with the finding of no significant impact regarding the potential environmental effects that could occur due to the two proposed timber harvest alternatives.*

Considering the findings, Sealaska urges the Forest Service to implement Alternative 2, which provides more timber for meeting the requirements of TTRA. In addition, this alternative has the best chance of generating a profitable return to the Forest Service while meeting environmental standards

Response: We agree. Thank you for your comment. _

E-mail comment from B. Sachau – Florham Park, NJ

SAC-1: *I think the following should be banned from this area: no hunting, no trapping, no grazing, no mining, no drilling, no new roads. That is my comment for the public record.*

Response: The proposed activities would result in building 0.6 miles of temporary road. The temporary roads will be closed and natural drainage patterns restored after harvest. The Forest Plan has already established what activities can be conducted within the project area through the use of Land Use Designations (LUDs).

Comment letter from William B. Privett, President – Wrangell Oil Inc.

PRI-1: *I would like the Forest Service to implement Alternative 2 for the Shady Timber Sale. This alternative allows the greatest recovery for cost and also allows a much needed economic boost to the local economy of Wrangell. I personally feel that there is enough surrounding forest to provide habitat for deer and other animal species indigenous to our forests. I appreciate the opportunity to comment.*

Response: We agree. Thank you for your comment.



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USDA Forest Service
Wrangell Ranger District
Tongass National Forest
PO Box 51
Wrangell, AK 99929

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